September 1983

CELEBRATING SIX PUZZLING YEARS

02811
$1.75

★ NATIONWIDE SCAVENGER HUNT! ★
★ 30 PRIZES! RULES, PAGE 14 ★

GAMES

FROM THE SOUVENIRS WE'VE COLLECTED, CAN YOU TELL WHICH U.S. CITIES AND FOREIGN COUNTRIES WE VISITED THIS SUMMER?

ANSWERS, PAGE 72

THE WELL-TRAVELED BAG

0 71486 02811

SUPERS

Its arcade games look and sound so real it seems an illusion to have them at home.

Its sports games are so lifelike you could end up with sore muscles and a hoarse throat.

In fact, everything about the ATARI® 5200™ SuperSystem is designed to make your wildest expectations seem tame.

Its arcade-quality cartridges can't be playe on any other system, not even with an adapto

Hits like PAC-MAN,[1] Centipede,™ Galaxian Star Raiders,™ Missile Command,™ Football and Soccer are here now. Others like Pole

This is the ATARI® 5200™ SuperSystem. The most versatile, controllable and enjoyable video game system you can buy.

1 PAC-MAN and characters are trademarks of Bally Midway Mfg. Co., licensed by Namco-America, Ltd. 2 Trademark of Bally Midway Mfg. Co., licensed by Namco-America, Ltd. 3 Pole Position is engineered and designed by Namco Ltd., manufactured under license by Atari, Inc. Trademark and © Namco 1982. 4 Dig Dug is created and designed by Namco Ltd., manufactured under license by Atari, Inc. Trademark and © Namco 1982. 5 Kangaroo is produced under license from Sun Electronics Corporation. 6 Indicates trademark [illegible] America Corporation 1982

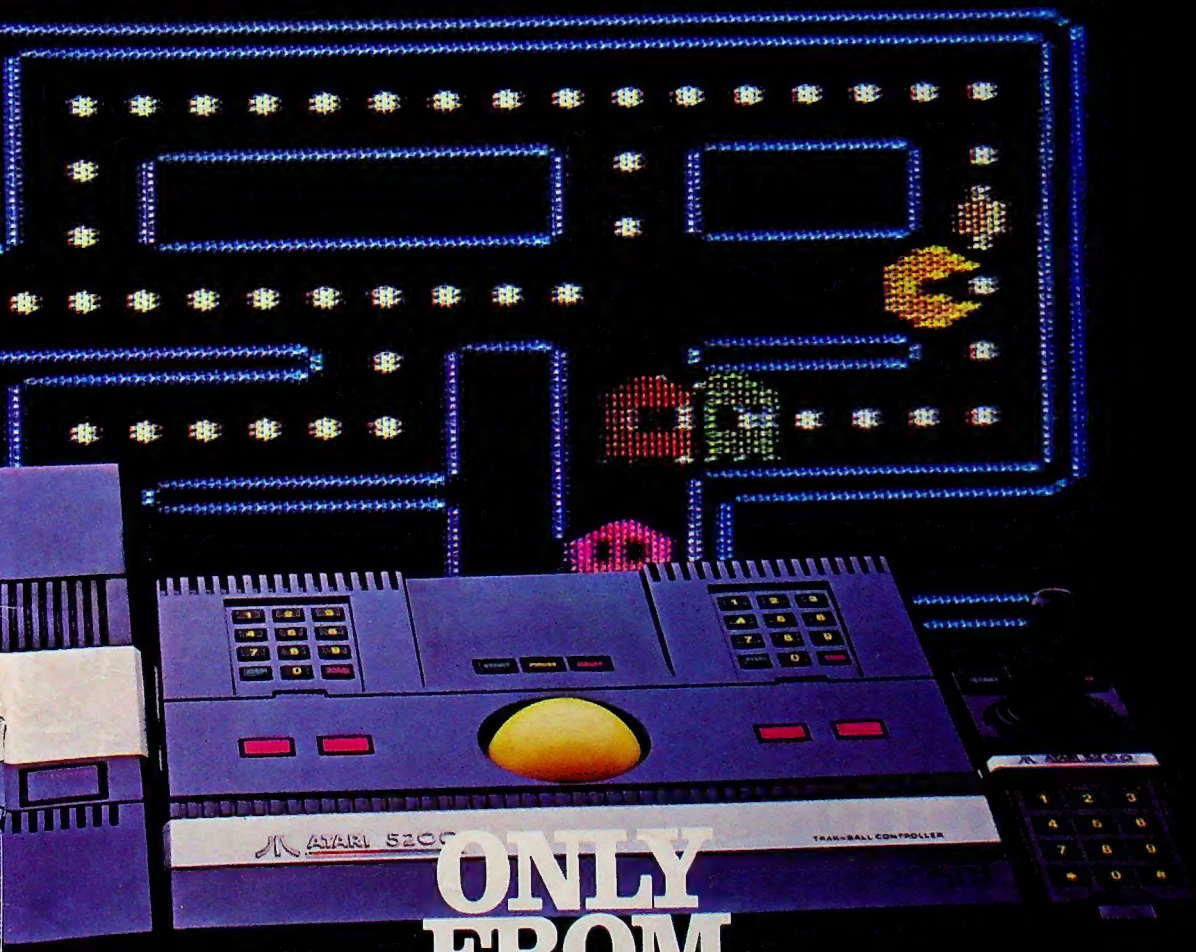
SYSTEM

Position,[3] Dig Dug,™[4] Kangaroo,™[5] Jungle Hunt,[6] Tennis, and Baseball are coming soon.

Its controllers have the only 360° joysticks on the market. A 12-position keypad. Plus start, reset, and the only pause button, all conveniently right in your hand.

Coming soon is a TRAK-BALL™ controller. An adaptor for ATARI 2600™ games. Even cartridges with human-sounding voice.

Compare the ATARI 5200™ with anything else and you'll see why we call it the Super-System. Because that's exactly what it is.



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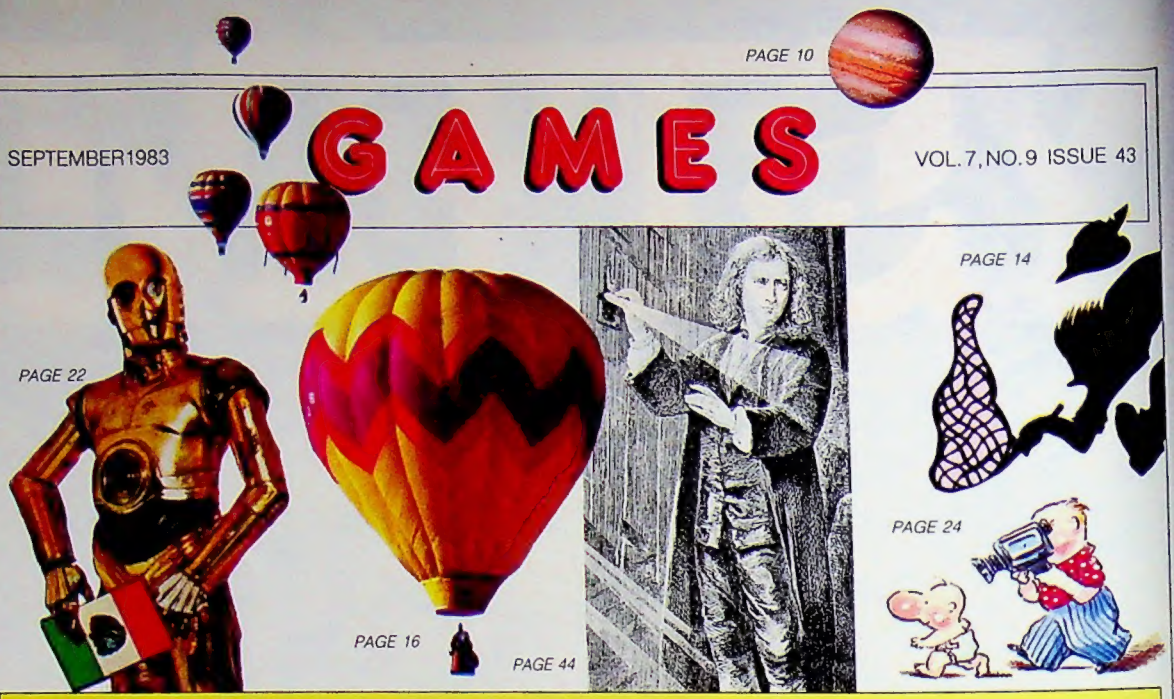
SEPTEMBER 1983

GAMES

VOL. 7, NO. 9 ISSUE 43



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Cover Photograph Aaron Rezny

HERE'S WHAT MAKES THE ATARI® 5200™ SUPERSYSTEM SO SUPER.

First off, it really is a system. A family of ATARI 5200™ Super-System components designed together to perform together.

Which is what any video gamer should look for. It's also an exclusive system. You can't play its high-resolution, arcade-speed 5200™ Super Games on anything else, not even with an adaptor.

And what's coming includes the most popular games, like Joust[1] and Pole Position,[2] now in the arcades.

ATARI 5200™ SUPERSYSTEM

It comes with a powerful 16K RAM (memory) built in. Which is 10 times more intelligent than Intellivision.™

It generates 256 colors, compared with Colecovision's 16. And 320 lines of graphic resolution, a good 25% sharper than Colecovision.™

Its circuitry reads signals fast. So with 5200 arcade cartridges, nothing gets lost in translation. Including game speed.

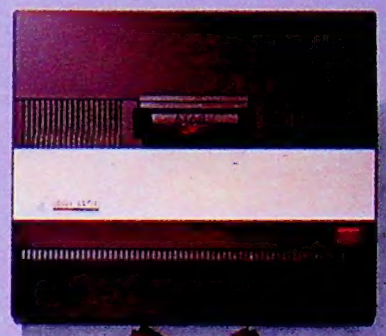
What's more, the controllers actually feel good in your hand. With solid joysticks, not clumsy little disks.

And the action is full-circle, 360°. Instead of 16 or 8 positions like other joysticks.

There are left- and right-handed fire buttons. A 12-digit keypad. Plus start and reset all in your hand.

There's even a pause button, in case the phone rings. And it rings a lot when you have an ATARI 5200 SuperSystem.

Everyone wants to come over and play.



ATARI 5200™ TRAK-BALL™ CONTROLLER

If you know video games, you know what TRAK-BALL is. The fastest controller in the arcades.

And now for the ATARI 5200 SuperSystem.

It gives Centipede,™ Galaxian,[3] Missile Command™ and other 5200 SuperSystem games true arcade feel and control.

And turns our new RealSports™ games into real athletic workouts.

ATARI TRAK-BALL is mounted in a hefty base so it won't slip or slide around in heavy use.

All other controls are built right in. With fire buttons and keypads for both lefties and righties.

You just plug it into your ATARI 5200 SuperSystem and let the good times roll.

ATARI VCS™ CARTRIDGE ADAPTOR

This handy device gives you the best of both worlds.

It lets you play all the great ATARI 2600™ VCS games—like Asteroids,™ Berzerk,[4] Yars' Revenge,™ the Swordquest™ series—as well as the new 5200™ Super Games, all on one SuperSystem.

ATARI 5200™ VOICE

Speaking of video games, that's exactly what some ATARI 5200 games will do.

Generate a human-sounding voice in response to gameplay.

To guide you. To warn you. Maybe even to scare you a little.

Adding a whole new dimension of video game realism and fun.

ATARI 5200™ SUPER GAMES

Centipede,™ Vanguard,[5] PAC-MAN,[6] Galaxian, Qix,[7] Star Raiders,™ Football, Baseball, Soccer, and Tennis are here now.

Pole Position, Joust, Moon Patrol,[1] Jungle Hunt,[8] Tempest,™ Battlezone,[8] Dig Dug,™[9] Xevious,[2] and Pengo[10] are coming soon.

With 5200 graphics, gameplay and sound, in cartridges that no other system, nor their adaptors, can play.

And they're the hottest games now in arcades.

Choose Colecovision or Intellivision and you'll never play them at home.

It's that simple.

So think ahead to the games you'll want to play.

We're pretty certain which system you'll want to buy.

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LETTERS

Another Passenger

Did you neglect the 40th animal on your June cover, the U.S.S. *Ark*? There on the second deck, as plain as day, is Harvey the invisible rabbit. Jimmy Stewart would be ashamed.

Daryl Judd
Nampa, ID

Envelope of the Month

Frank Thompson
Largo, FL

For results of our "Do You Clerihew?" Contest, see page 60.—Ed.

In Search of Fireball

I enjoyed your Gamebit "Flip Service" (June, page 12), having played pinball machines before the invention of video games. Several years ago I ran across Fireball, a game similar to Black Knight, and haven't seen it since. The game used an extra set of flippers, allowing simultaneous play of several balls; it had a revolving disk near the bottom flippers that threw an element of uncertainty into the draining of the ball; and the flippers could move closer together to stop the ball from draining. I'd love to play Fireball again. Do you know if it still exists, or have I "flipped out"?

Carolyn Zintak
Arlington Heights, IL

Indeed, Fireball still exists, reports our author, Roger C. Sharpe, but only in the hands of collectors. It was released by Bally in 1972 and is considered the preeminent collectible pinball machine of the 1970s, with its multiple ball play, spinning disc, and "zipper flippers." Check with local pinball machine distributors or collectors.—Ed.

Safety First

I haven't seen a Plaza Roach Hotel yet, but another item in your Fake Ad for "The Complete Urban Catalog" (May, page 13) is, alas, all too real. I read in the Alliance, Nebraska, *Times-Herald* about "a line of fashionable, bulletproof clothing" produced by Emgo U.S.A. The down safety vest pictured looks a lot like the one in your ad. According to the newspaper, "The company thinks crime-conscious Americans will spend $275 and up to be chic and safe."

Ann Sutton
Ashby, NE

Gaffed Again

In your article exposing "Carnival Gaffs" (June, page 18), you mention a game where the task is to toss a ball into a bushel basket. The reason the player can't accomplish this simple feat is that the basket is secretly tilted toward the front of the booth; when the player tosses the ball in, it hits the angled basket and bounces right back out.

I've come across a variation on that gaff. When the carny demonstrates the game, he uses a hollow ball, which is easy to toss into the basket. But when the player tries, he's given a solid ball, which bounces back out. Usually, the carny uses an older looking ball, whereas the player—the "mark"—gets a nice, new, white one. Squeeze them next time!

Clyde T. Eisenbeis
Oakdale, MN

That's Not Punny

Since I didn't enter your "Gluttons for Punishment" contest, I have no right to complain about the results (June, page 63). But I am 49 years old, and I heard "That was no ladle, that was my knife," one of your runners-up, some 40 years ago. Are you sure the judges were groan-ups?

Conrad Horn
Washington, DC

You slipped up in choosing "Do you cache Czechs here?" as an original pun. I found it in *Reader's Digest* seven years ago, and they got it from *Sports Illustrated*!

Jane Zedik
Holiday, FL

We said we were "Gluttons for Pun-ishment"—in more ways than one.—Ed.

Americana Askew

Our founding fathers must be turning over in their graves at the anachronisms in your "Early American Lithographs" Fake Ad (July, page 11). The painting of George Washington crossing the Delaware features a few tropical palm trees; Paul Revere's midnight ride shows television antennas on the houses; the Boston Tea Party depicts skyscrapers hovering under a revolutionary moon; the signers of the Declaration of Independence enjoy the breeze of an electric fan; and the Spirit of '76 musicians sport a Washington Redskins decal on their drum!

Deborah Benedict Gedwillo
Lincoln, NE

Palms Along the Delaware?

GAMES

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INSERTS: Franklin Mint between pages 10-11.

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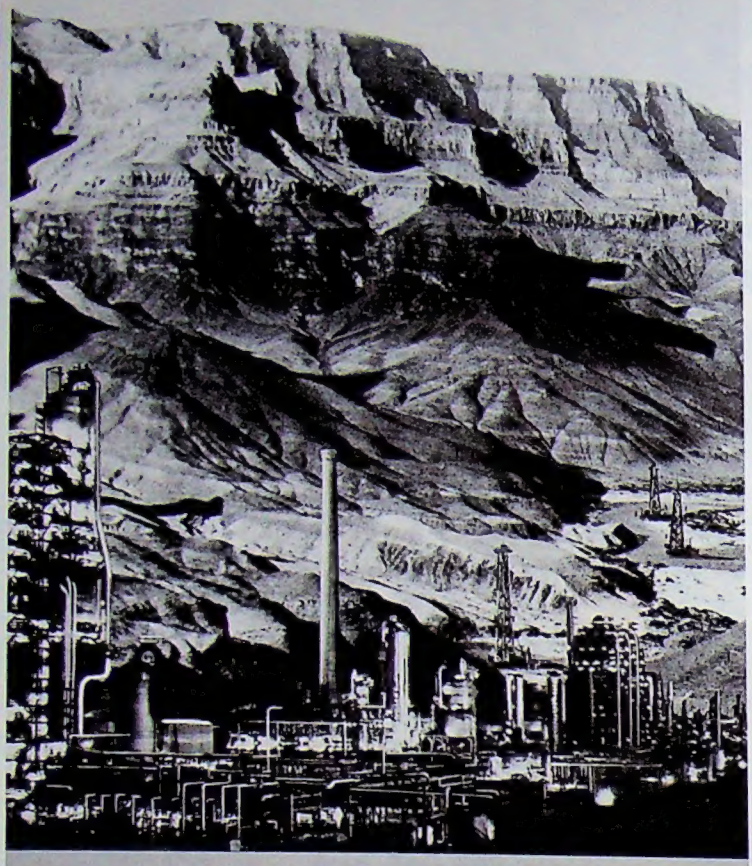

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The glories of the Grand Canyon, the wonders of Yosemite, and the splendors of Yellowstone are among America's greatest riches. Now you can share the wealth with our special once-and-forever tax shelter offer.

All these national parks—and many others—are located above tremendous mineral resources—resources vital to rebuilding America. For a limited time, we are offering exploration rights to these parks. Subscribers can earn tax-free income and turn their vacations into business trips. Additionally, they can reserve their options on building rights for future land development on specified national park sites. For more information about this extraordinary proposition, write:

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LAUNDRY

If a reader finds a significant error of fact or a mistake that affects the play of a game, and if we agree the slip needs to be laundered, we'll print the first or best letter and send the writer a GAMES T-shirt.

Mistakes: July

★In Laundry (page 6), you made a correction that contained a new mistake. Robert E. *Perry* did not discover the North Pole in 1909—it was Robert E. *Peary*.

Edith Larson
Manton, MI

★In the crossword puzzle "Let's Face It" (page 31), you show two clues for 24-Across. The second 24-Across should have been numbered 34-Across.

Chuck Lynch
Birmingham, AL

★In cryptogram 5 in "Dszquphsbnt!" (page 34), ciphertext letter H stands for plaintext letter H. Do you have any idea what that does to someone at 3 A.M.?

Ann Belfi
Lynnbrook, NY

That wasn't, unfortunately, another case of our being tricky. By convention, cryptogram letters cannot represent themselves.—Ed.

June

★In "Constellations" (page 45), I found an error in the play of puzzle 2. The directions claim that "every line and letter will be used one or more times." However, the line connecting the R and O is never used to spell *Raiders of the Lost Ark*.

Ben Payne
Hanover, NH

★In the answers to "What's it All About, Oscar?" (Wild Cards, page 66), both *Midnight Cowboy* and *Mutiny on the Bounty* are listed as Best Picture of 1969. *Cowboy* did win that year; *Mutiny* won in 1935.

Martha Leach
Albuquerque, NM

In "What's it All About, Oscar?" you say *One Flew Over the Bridge* is correctly "split" into *One Flew Over the Cuckoo's Nest* and *Bridge Over the River Kwai*. The actual title of the latter is *The Bridge on the River Kwai*, a reference to the end of the movie, when the bridge was blown up and indeed was no longer over but *on* the river.

John E. Kilroy
Philadelphia, PA

★I noticed an error in "Daddy Dearest" (Wild Cards, page 67): Frank Zappa has four children, and Rodan is not one of them.

Bob Saydlowski, Jr.
Pittsfield, MA

You list Wayne as being one of Frank Sinatra's children along with Frank, Nancy, and Tina. As a Sinatra fan of long standing, Wayne is news to me!

Sandra Sartor
Des Moines, IA

EVENTS

If you plan to attend any of these events, write or call to check entry fees, dates, sites, eligibility, etc. Include a stamped, self-addressed envelope with your request.

Ballooning Helium and hot-air balloonists will compete at the California Balloon Festival, September 16–18, at Visalia. For more on this and other balloon events, see page 21.

Craps An estimated $200,000 in cash prizes will be awarded to winners of the World Championship of Craps, September 11–14, at the Riviera Hotel in Las Vegas. More than 2,000 players are expected; the entry fee is $275. Contact: WCBJ, Inc. 20201 Sherman Way, Suite 107, Canoga Park, CA 91306, or call (800) 423-5966, or, in California, (213) 998-2121.

Croquet The U.S.C.A. National Singles and Doubles Championship invites wicket competition September 21–25 in New York's Central Park. Players must belong to the U.S. Croquet Association; nonmembers are welcome to join. Contact: Jack Osborne, 635 Madison Avenue, New York, NY 10022, or call (212) 688-5495.

Go Players can "go" from coast to coast at the U.S. Eastern and Western Go Championships in New York and San Francisco, September 3-4. Beginners are welcome, but all players must be members of the America Go Association. Contact: Terry Benson, 617 West End Ave., New York, NY 10024, or call (212) 724-9302.

Map Dash The 1983 Great Maltese Circumglobal Trophy Dash begins September 30 (entry deadline 10/27). Supplied with the lightest of gear—maps and cryptic rules—contestants make a speedy attempt to "circumnavigate the world." Prizes go to all travelers finishing on time; the top 10 percent win a laser-engraved plaque. Fees are $18 per single entry, $17 each for two or more. Contact: Trophy Dash, Box 53, La Canada, CA 91011.

Robotics Computer enthusiasts can tell a number 1 hero what to do in the *Microcomputing*/Heath HERO 1 Robotics Programming Contest, sponsored by *Microcomputing* magazine. Heath's HERO 1 is billed as America's first low-priced ($1,500) home robot. He can already speak and be programmed to do simple chores; computer buffs can get him rolling in new directions by submitting a program before September 1. Winners will be announced in the December issue of *Microcomputing* and will receive a $500 gift certificate from Heath. Contact: Robotics Contest, *Microcomputing*, 80 Pine St., Peterborough, NH 03458.

Triathlon Some $25,000 in prizes will be offered at the World's Toughest Triathlon, September 10 at Lake Tahoe, California. The competition includes a 2.4-mile swim, followed by 120 miles of bicycling and a 26.2-mile run. Entry fee is $100 for individuals, $200 per relay team. Participants must be 18 or older. Contact: Jim Douglas, Box 9045, Lake Tahoe, CA 95731, or call (916) 541-1660.

ANNOUNCING

The 1983 Great Maltese
CIRCUMGLOBAL
TROPHY DASH

CASCADE

This is your invitation to the grandest touring challenge in the world. The fourth annual competitive *circling* of the globe. At your **kitchen table.** On **maps.**

More than 4000 people set out on last year's competition. At the end, we asked them if they expected to be back this year. **96%** of their answers were **YES.**

- ***A jolt of challenging, invigorating, satisfying happiness!***
- ***The most enjoyably sophisticated game I've ever had the pleasure of playing.***
- ***Different from anything we've ever done in our lives.***

The entry fee is $18 for a single entry, or $17 each for two or more — invite a friend. We'll send separate sets of all materials — instruction books and sheets of maps — and we promise to more than double your fun.

We'll send everything you'll need on September 30 or, for later entries, as soon as we hear from you (entry deadline: October 27).

The Circumglobal Trophy Dash: the only money-back-guaranteed around-the-world tour you'll *ever* find. We hope you'll join us.

- ***I thought I was gonna die!***
- ***I wish it would have never ended.***

Trophy Dash
P.O. Box 53 • La Canada, Calif. 91011

Entry fee payable to 'Trophy Dash': $18 for one, or $17 each for two or more (enclose separate sheet for extra names and addresses). [*If sending Canadian dollars, please add $5 per entry.*]

name

address

city state zip

GAMEBITS

Edited by Curtis Slepian

PHOTOGRAPH BY STAN FELLERMAN

The Cards of Summer

As the days cool and the pennant races heat up, vast numbers of ball players are being traded, bought, and sold—not by club owners, but by baseball-card collectors. And the prices they pay for some of these cardboard heroes might give even George Steinbrenner pause.

For kids, baseball cards are fun to trade, pitch, or flip—until that inevitable day when their mothers toss them out. But for those lucky few who kept them away from Mom, baseball cards can be an obsession—or at least a big-bucks hobby.

Indeed, card collecting is such a major-league business that in 1981 the FBI had to break up a California counterfeiting ring that was making copies of a valuable 1963 Pete Rose card. Some card investors are so devoted they willingly skip the pleasures of bubble gum and buy blocks of new cards straight from Topps, the major card manufacturer, in hopes their picks will someday be Hall of Famers, thus boosting the cards' worth on the market.

Perhaps the heaviest hitter among card collectors is Renata Galasso, Inc. This Brooklyn, New York, firm claims to be the world's largest hobby card dealer, a $2 million business that handles more than 100 million cards yearly. Galasso has 100,000 (largely adult) customers on six continents, including U.S. congressmen, a four-star NATO general stationed in Belgium, and a syndicate of Kansas City housewives who buy cards in $2,000 blocks.

Bill Hongach, the firm's manager, has a personal collection of 7 million baseball cards stashed in his basement. Serious collectors, he says, are willing to shell out $10,000 for rare artistic treasures like the oversize 1910 T-3 set. Produced by Red Turkey cigarettes, these portraits look handsome enough to hang in a museum (one in Cooperstown, anyway). And fans are willing to spend even more for the legendary Honus Wagner card. A nonsmoker, Wagner forced a tobacco company to withdraw a card bearing his picture, and today the few that got away can bring $25,000.

Cards of current ball players don't command those gaudy sums . . . yet. A ball-park figure for a 1973 Mike Schmidt, for example, is a mere $50. But that sought-after 1963 Pete Rose card (from his rookie season) is now worth close to $500—and that figure will probably double after Rose sets more hitting records. Owners of a Robin Yount card hope his future will be as sweet as Rose's: After Yount's 1982 MVP season, his card jumped in value from $2 to $12.

Over the years, the cards have helped perpetuate some genuinely goofy nicknames, from Bootnose Hoffman and Swamp Baby Wilson to Mother Watson and Raw Meat Rodgers. Unwrap this pack of nicknames and see if you can match them to the players' real names.

—Daniel Ross Bronson

1. Moose	a. Sal Maglie
2. The Bull	b. Al Hrabosky
3. The Toy Cannon	c. Ken Harrelson
4. The Baby Bull	d. Greg Luzinski
5. Dr. Strangeglove	e. Dick Stuart
6. The Barber	f. Orlando Cepeda
7. The Mad Hungarian	g. Bill Skowran
8. The Hawk	h. Dick Radatz
9. No Neck	i. Walt Williams
10. The Monster	j. Jimmy Wynn

Answer Drawer, page 69

Star Magic

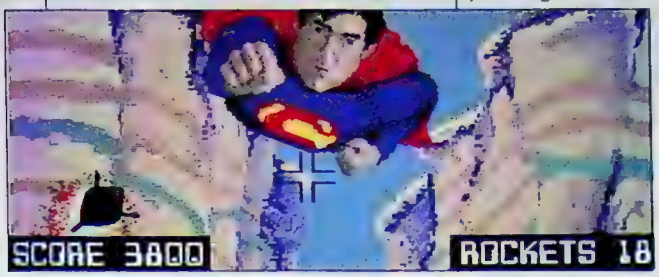
If you ever get the urge to reach for the stars, there are many to choose from at Star Magic, a store packed with toys and art of a scientific bent.

At either the New York or the San Francisco branch, browsers can buy such unusual items as a $2 holographic pin, a $25 solar-powered music box, a $75 globe that shows the night sky at any date and hour, or a $450 Fiberoptic Lamp that glows like a small, brilliant galaxy.

All that space-age gadgetry exerts a strong attraction for kids, whose purchases often include large quantities of foil-sealed freeze-dried astronaut food. The desiccated peaches and ice cream may taste a bit chalky, but the kids say they *have* to eat them—they're practicing.

—S.G.

Superman Goes Video



It's a bird, it's a plane . . . it's Atari's Superman.

If you'd like a peek at video games to come, take a look at this summer's special effects blockbuster, *Superman III*. In between the exploits of Christopher Reeve, Richard Pryor, et al., you'll find a 26-second cartoonlike sequence of the Man of Steel, as seen on a video monitor, flying through a canyon as rockets explode all around him. Everything on that monitor, including the caped wonder himself, was computer-generated by Atari.

Why employ a video game company to do a sequence for a major Hollywood movie when Hollywood is full of established computer-animation houses—the kind that provided spectacular effects for *Star Trek II*, *Tron*, and *WarGames*?

One reason is that Warner Communications, which produced the film (and which owns Atari) wanted the footage "to convey the spirit of a super mega-video game of the future," in the words of Steve Wright, head of Atari's Special Programs Division.

While other films that have used computer-generated graphics were aiming for a realistic effect, the *Superman III* sequence intentionally carried the look of flat—or "2 ½-D"—graphics. "If it had looked too real, we would have failed," says Pat Cole, software manager for the project. These "low resolution" images were then combined by computer to give the merest suggestion of depth, similar to that achieved in some of the classic early Walt Disney cartoons.

It took the six-member Atari team, which included an amateur pilot to help design Superman's flying motions, 10 weeks to create the software program for the sequence and three and a half months to record and re-record each frame on various video units and cameras, finally melding the whole together and filming it. To produce this half-minute of film cost $120,000 for equipment alone.

Since *Superman III* revolves around the superhero's battles with a supercomputer, it seems fitting that Atari is planning its own version of *Superman III* as a game for its line of home computers. Of course, the game can't look anywhere near as good as what was seen on screen. But if the movie's electronic gaming vision is correct, anything is possible in the future.

—Les Paul Robley

A Good Deal for the Little Guys

The World Series of Poker, held every May at Binion's Horseshoe Casino in downtown Las Vegas, has always been an event strictly for the elite of the poker world. Legendary players like Jack "Treetop" Straus (the '82 champion) and Doyle "Texas Dolly" Brunson (the '76 and '77 champ) think nothing of putting up $10,000 to enter the tournament—to them, that's just a medium-size pot.

In the past, low-stakes amateurs like us could only stand behind the rail at the World Series, dreaming about pushing those towering stacks of $1,000 chips. This year some of us didn't have to dream. Three Las Vegas casinos—the Bingo Palace, the Four Queens, and the Tropicana—attracted hundreds of players by offering buy-ins for as little as $25. Along with a share of the prize money, the winners received a free buy-in to one of the dozen big-money tournaments that make up the World Series of Poker.

The culminating event of the tournament is a no-limit hold'em world championship usually worth a cool half million dollars. (Hold'em poker is a variation of seven-card stud in which each player uses his two hole cards in combination with five community cards to form the best five-card hand.) Las Vegan Rod Peate wanted a piece of that action, but a month before this year's championship he was broke. Peate had to borrow $25 to play in a Bingo Palace hold'em satellite, where he barely made it to the final table. But by getting there, he qualified for a $100 satellite, which he won, earning him a seat in the Horseshoe hold'em championship. Another young local product, Tom McEvoy, made his way into the big tournament by winning a $1,000 satellite at the Horseshoe. Altogether 108 players were vying for $1,080,000 in World Series prize money.

Most people figured the satellite winners would be soft as butter for the veterans of high-stakes games. But when the four-day championship came down to the final three, there were Peate and McEvoy facing the indomitable Brunson, perhaps the game's greatest player. Though Brunson was the clear favorite, Peate busted him in a $600,000 pot with three 9s against Brunson's flush draw.

Unfortunately, that was as far as Peate's $25 took him. After a six-hour battle, McEvoy took the $540,000 first prize when his queens and 6s beat Peate's jacks and 6s. For second place, Peate had to settle for a mere $216,000. Amazingly, two other satellite winners, Bobbie Gears of Las Vegas and R.R. Pennington of California, also finished in the money.

Said a disappointed Brunson after the tournament: "I felt I was probably going to win . . . . Finishing third is worse than finishing last."

—R.D.

Buss Stop

Last spring Barbara Kane and Dino Delorean set out to break their *Guinness Book of World Records* mark—144 straight hours of kissing—in a smooch-a-thon held in New York. After exchanging kisses for 10 consecutive days (with a five-minute break every hour), the two Los Angelenos continued their clinch on a plane to Indiana—under the vigilant gaze of a Guinness observer. Eleven days later they ended their record-smashing performance, having kissed 508 straight hours before getting puckered out.

—C.S.

ILLUSTRATION BY MICHAEL BARTALOS

MAGIC★

interplanetary mind reading

For the true psychic, no distance is too far for the mind to leap—even the farthest reaches of outer space are accessible. To prove my point, I've set up this little journey around our solar system.

You'll need a dime and eight pennies. To start, place the dime on any square, anywhere in the solar system. Move the dime one space, either horizontally or vertically (*not* diagonally), for each letter in the name of your launching space, not counting that space itself.

Now that you have finished spelling, I am sure that the dime is not on Neptune—so put a penny on that square. (Once a space is covered by a penny, you can no longer land there, but you can move over any other space as often as you like.)

Move the dime *five* times. I feel certain that the dime is not on Mars, so cover that space with a penny.

PHOTOGRAPH BY GARY WASHTON

Move the dime *two* times. I will guess that the dime has not landed on Uranus, so put a penny there.

Move the dime *three* times. There is no doubt about it—you can cover up both Mercury and Jupiter.

Move the dime *one* time. You can put a penny on Saturn.

Move the dime *three* times. Leave the dime wherever it has landed. Put pennies on the other two squares.

All of the squares are now covered. Kindly fix in your mind the square your dime has ended up on. Link your mind with mine and let my psychic force reach you across space and time. Your aura is very strong . . . . I can feel where the dime is . . . . It's in . . . the Answer Drawer, page 70.

Max Maven, The Thief of Thoughts, is among mentalism's most innovative practitioners. He often performs on TV and on stage worldwide.

The master engravers of The Franklin Mint present . . .

The Official Flags of All Nations — finely minted miniatures of pure gold on solid sterling silver. Just $6 each.

The official flag of every country in the world—each minted with brilliant micro-detail.

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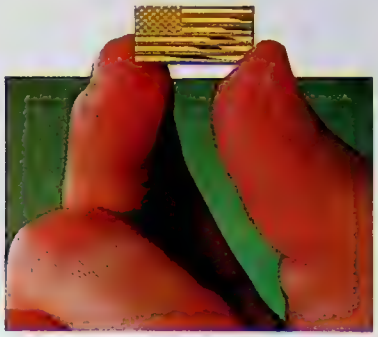
Even the intricate globe-and-star design of the flag of Brazil, and the hawk of Quraish on Egypt's flag, can be clearly seen. And the proportions of these miniatures will vary as well, with each one carefully scaled to the exact shape and dimensions of the flag it represents.



Miniatures above shown actual size.

So that you can immediately study each flag in all its fascinating detail, a special magnifying glass and a pair of collector's tongs will be included with your first group of miniatures. And, to house and display your complete collection, a custom-designed collector's case will also be provided as part of your subscription.

In addition, each miniature will be accompanied by an informative commentary, written especially for this collection by Dr. Whitney Smith, the world's foremost authority on flags and their history. Each of these commentaries will describe the particular flag being honored and will explain both its history and its symbolism.

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However, the total edition of this remarkable collection will never exceed 25,000 sets world-wide. And subscription applications will be accepted on an as-received basis. Therefore, you are urged to mail your application promptly to The Franklin Mint, Franklin Center, Pennsylvania 19091.

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I need send no payment now. I will be billed for each gold on silver miniature at the guaranteed issue price of $6.*, in advance of its shipment.

**Plus my state sales tax and 50¢ per miniature for postage and handling*

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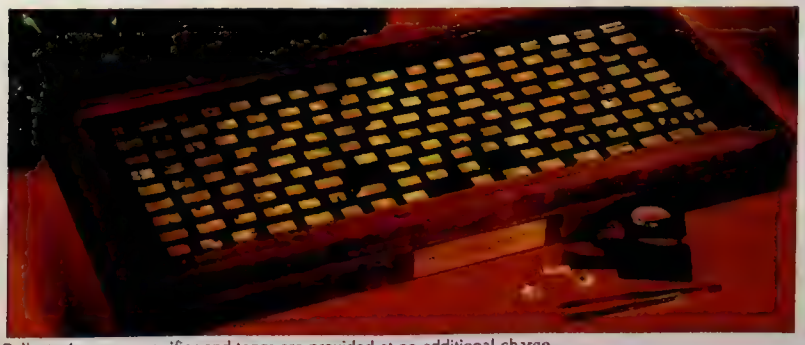


Collector's case, magnifier and tongs are provided at no additional charge.

It's All Greek to Me

Siren Song *

by Stephanie Spadaccini

Only three sailors survived the wreck of the *Lallipappas*. The good ship had been lured to the rocks surrounding Circe's island and, as the three men washed ashore over a series of days, Circe turned them into swine.

A week after the first man had washed ashore, two of the three pigs had gone to hog heaven. What was the name of the survivor, and what color was he?

1. Uppamolas was the last to arrive.
2. The pink pig ate so many stuffed grape leaves that he died from overeating before the other men landed on the island.
3. The second man was turned into a gray pig.
4. Dethentaxes loved wallowing in the mud. One day he mistook a pit of quicksand for a mud hole and sank without a trace.
5. Blumenes was not the black pig.

Esperanto, Anyone? **

by John Mayer Turbyfill

Seven delegates at an international convention agreed to meet one evening to discuss a few topics of interest.

The American and the Russian spoke only their native languages. The other five spoke a total of 10 languages among them: Arabic, Czech, Danish, English, Finnish, Greek, Italian, Russian, Spanish, and Tagalog.

The American spoke to Pravitt, Pravitt translated for Jorlaan, Jorlaan for Marnik, Marnik for Neubtor, Neubtor for Bjellorsen, and Bjellorsen for the Russian. All of these delegates were needed to complete the chain between the Russian and the American, and no two of them shared more than one language.

Using the information below, can you deduce which languages each of the delegates spoke (excluding the Russian and the American), and what was each one's native tongue?

1. Pravitt and Marnik each spoke two languages. Bjellorsen spoke four. The others each spoke three.
2. Only one delegate was a native Danish speaker.
3. There were two Arabic speakers, neither of them native, and neither of these two spoke English or Russian. One of the native Spaniards had learned Arabic to study its influence on Spanish.
4. Only Bjellorsen had a native tongue that no other delegate shared.
5. One delegate spoke the unlikely combination of Finnish and Tagalog. Only one of these languages was needed to complete the chain.
6. Pravitt and Jorlaan were compatriots.
7. There were two Italian speakers, neither of them native. One was a native Spaniard who had learned Italian because of its similarity to Spanish.
8. Had Marnik spoken either Finnish or Greek, the chain would not have needed all five delegates to go from English to Russian.

The Play's the Thing ***

by J. Mark Thompson

It was the earliest part of a fine Attic summer, and all the city had special reason to be satisfied: The Duke of Athens was about to marry. Five Athenians intended to present a play as part of the wedding celebration. They were a Cobbler, a Woodworker, a Smith, a Potter, and a Brewer. Their names were Francis, John, George, Richard, and Lawrence, though not necessarily in that order.

To rehearse in privacy, they met the night before the wedding in the woods outside Athens, and there took up the parts of Atalanta, Hippomenes, Venus, the King, and Echion. Little did they dream that it was Midsummer's Night, and that the elves and fairies of the wood were abroad

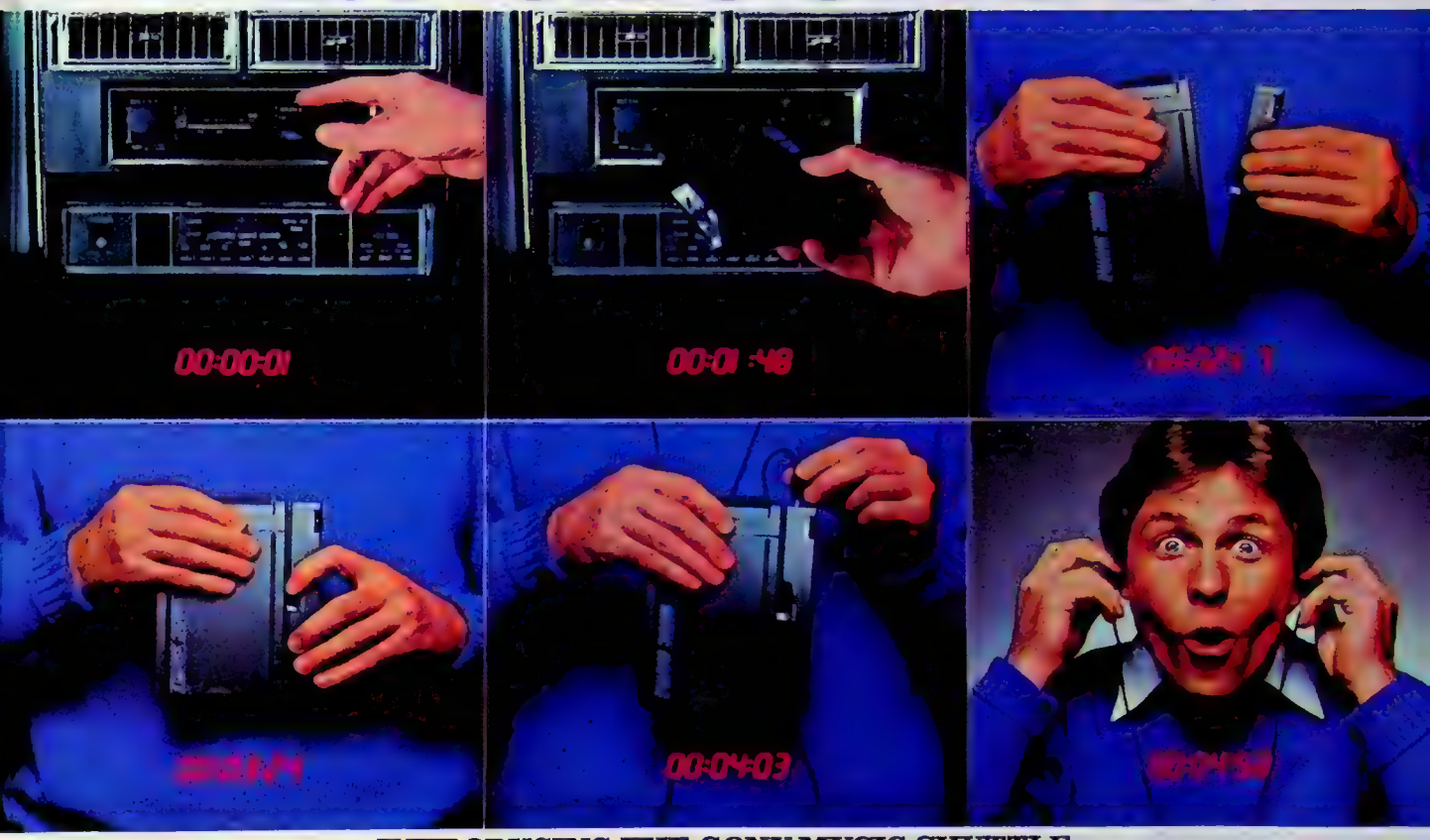
From the information below, can you deduce what part each of them played, what profession each pursued, and the order of their ages from youngest to oldest?

1. The two youngest men were assigned the female parts of Atalanta and Venus. John protested that he was starting to grow a beard. George and Lawrence laughed at the younger man's vanity, although Lawrence, who was closer to John's age, felt more sympathy for him.
2. The Smith asked Richard, the leader of the amateur troupe, to give him his lines early; but even with this advantage he forgot a few. Richard rebuked him, and the Smith would have taken offense had the leader not been his elder.
3. Robin Goodfellow, a mischievous sprite of the forest, spied Francis and the Potter in the glade declaiming their lines, one of them acting the part of Atalanta, and the other her unsuccessful suitor, Echion. When the man playing Atalanta's father, the King, entered, Robin was further amused to see that the man playing Echion was much older than the one portraying the King.
4. The Woodworker, who was nearby at that moment, made a joke about this inconsistency of ages to the man playing Hippomenes. This was tactless, since the man playing Hippomenes was even older than the man playing Echion.
5. Up to his old tricks, Robin Goodfellow turned the actor playing Hippomenes into an ass just before his most dramatic entrance. When Francis, the Cobbler, John, and the man playing Venus saw him step into the glade thus transformed, they all took fright and ran home, amid their friend's braying protests.

Alas, the fable ends here, and we will never know if Hippomenes ever regained human form or if the play was successfully performed at the wedding feast. That should not, however, prevent you from solving the puzzle.

Answer Drawer, page 66

IT GOES FROM CAR STEREO TO PORTABLE IN 4.5 SECONDS.



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Now you don't have to leave the extraordinary sound of a Sony car stereo when you leave your car. Instead, you can carry it with you, thanks to the Sony Music Shuttle.™ The first car stereo that turns into a portable stereo.

At the push of a button, the Music Shuttle's cassette player ejects, and is ready for a battery pack and headphones.

What's left behind in your dashboard is the Music Shuttle's AM/FM radio. A radio that delivers high-fidelity stereo even when the cassette player isn't in your car.

Also left behind is a large, conspicuous hole where the cassette player once was. A hole that will do more to discourage a thief than any alarm or lock.

All of which makes the Music Shuttle the first car stereo that, literally, leaves nothing to be desired.

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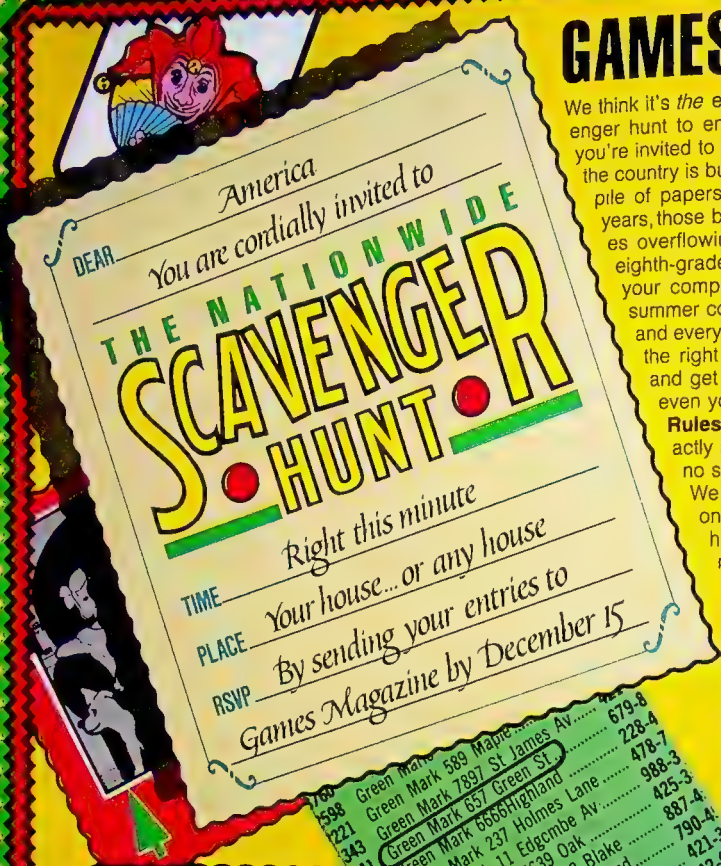

GAMES CONTEST

We think it's *the* event of the season, the scavenger hunt to end all scavenger hunts—and you're invited to take part. Don't sit back while the rest of the country is burrowing through its closets. Dig into that pile of papers you've been collecting for the last 20 years, those bulging manila envelopes and dusty boxes overflowing with such vital memorabilia as your eighth-grade book report on *Goodbye, Mr. Chips*, your complete set of Zorro cards, your collected summer correspondence from Camp Run-A-Muck, and every bill you've ever received. You may have the right stuff already. If you don't, then go out and get it—before your friends or neighbors or even your mother beats you to it.

Rules of the Game The entries must be exactly as described on the next page—there's no such thing as close in a scavenger hunt. We doubt that anyone will find everything on the list, and in fact have no inkling of how many items the winning entry may contain. Phone queries on the hunt cannot be accepted, so, if in doubt, use your judgment. In general, the list is to be interpreted quite literally—but if an ingenious alternative is not specifically prohibited, it's fair. For example, #3 asks for "a doctor's bill for less than $20." Since we don't say what *kind* of doctor—or that it be a recent bill—a chit from a veterinarian, a chiropractor, or even a doctor of philosophy will do, as will a bill dating from, say, 1953.

PRIZES

1. Two tickets to the 1984 Super Bowl
2. A complete set of GAMES, leather bound with your name engraved on the cover
3. An Apple 11e computer
4. A Honda XL80S motorcycle
5. A collection of pre-1960 Cracker Jack prizes
6. *The Compleat Beatles* (record or tape)
7. A Super Phone CT60 cordless telephone
8. A 1957 Mickey Mantle baseball card
9. A Nikon FG 35mm camera
10. A 26-inch Rolls-Royce model car
11. An Advanced Dungeons & Dragons Game System
12. Dinner for two at a Chinese restaurant
13. An Atari 5200 and five video games
14. A JVC video cassette recorder
15. One hundred quarters
16. A Bushnell Discoverer telescope
17. An Alexander Graham Bell TetraKite
18. *The Times Atlas*
19. A pair of Nike Air Wedge sneakers
20. A brass-trimmed steamer trunk
21. A pair of cross-country skis
22. A Casio calculator game watch
23. A Berlitz beginner's language tape (your choice of French, Italian, or Spanish)
24. A Staunton chess set
25. An Ewok doll
26. A Swiss Army knife
27. A Sherlock Holmes Consulting Detective Game
28. A pair of Sony car stereo speakers
29. A Schwinn Super Le Tour 12-speed bike
30. A Polarguard sleeping bag

ILLUSTRATION BY DOUG TAYLOR

Grand Prize
First dibs at one of 30 prizes
29 Runners-Up
. . . share the rest

Photocopies are acceptable only as indicated(*). All documents should be numbered to correspond with the numbering of the list. Any document the judges deem has been tampered with will be disqualified.

Winning There will be 30 prizewinners. The entrant who submits the greatest number of correct items may select, as the grand prize, any item on the prize list. The entrant with the second greatest number of correct items may select any one of the remaining prizes, and so on down to the 30th-place winner. Any ties will be broken by random draw.

How to Enter All items must be mailed and arrive together in one envelope not larger than 9 x 12 inches. The number of items it contains must be written on the back, along with your name and address. Theoretically, you may enter more than once, but we doubt that it's practical. All entries become the property of GAMES and none can be returned. Happy hunting.

Mail entries to: Scavenger Hunt, GAMES, 515 Madison Ave., New York, NY 10022. Entries must be received by December 15, 1983.

READY...SET...FIND...

1. The printed label from a food product that includes tamarinds and anchovies among its ingredients
2. A canceled postage stamp bearing the picture of a postage stamp
*3. A doctor's bill for less than $20
*4. A list printed in 1968 of the Top Ten (or more) single phonograph records for any week that year
5. A campaign button for a mayoral candidate (the word "mayor" must be printed on the button)
6. A Chinese menu with at least three misspelled English words (circle the misspelled words)
7. A glossy photographic print (not a page from a book or magazine) of Gene Shalit
8. A red clothes button with exactly two holes
9. A swizzle stick that has a heart-shaped top
10. A letter from the office of the President of the United States ("Season's Greetings" and letters printed in books and newspapers are not acceptable)
11. Any "A" ticket from Disneyland or Walt Disney World
12. A hotel "Do Not Disturb" sign printed in both English and Spanish
13. A newspaper or magazine crossword answer grid with the word "esne" in it (circle the word "esne")
14. A business card from a veterinarian whose last name is Byrd, Fish, Katz, or Wolf (alternate spellings not allowed)
15. A photograph of a computer monitor displaying the words "Scavenger Hunt"
16. A napkin celebrating a June wedding with the date printed on it
17. A bumper sticker that says "Honk if you're ——" (any word may go in the blank)
18. A paper placemat with a maze printed on it
*19. A phone book listing of someone whose last name is the same as that of the street he or she lives on (circle the listing)
20. An empty sugar packet with a picture of a woodpecker on it
21. A single-panel cartoon, from a newspaper or magazine, involving a scientist
22. A page from a calendar indicating a full moon on Friday the 13th
23. A ticket stub with a five-digit or longer palindromic number (reading the same backward and forward: for example, 31513)
24. The joker from a deck of playing cards with a sailing ship on the back
25. A timetable from Canada's VIA RAIL, listing the transcontinental route
26. A postcard mailed from south of the equator
27. A page from a television guide (newspaper or magazine) showing simultaneous airing of two programs featuring the same celebrity (circle the listings)
28. A "cents off" coupon that expired in 1975
29. A Christmas card with a photograph of at least three children and one dog
30. An expired I.D. card with your name and picture on it

* indicates photocopies acceptable

BACKGROUND PHOTO: R. KRUBNER/H. ARMSTRONG ROBERTS

A late 18th-century French gas balloon, "F. Lhoste," takes to the air with two patriots hanging on.

J. C. Charles misses immortality by a month when his gas balloon, the "Charlière," takes two men aloft in December 1783.

The first recorded rooster in space is launched in September 1783 in a Montgolfier hot-air balloon, with a sheep and a duck as co-passengers.

Rising to the Occasion

ON BALLOONING'S 200TH BIRTHDAY, PILOTS WORLDWIDE RACE IN HEATED COMPETITION. BUT FOR ONE PERSON, IT'S JUST THE EXCUSE FOR A HIGH-FLYING ADVENTURE **BY ELAINE B. STEINER**

The ascent of man continues in August 1978 when the gas-inflated "Double Eagle II" becomes the first balloon to cross the Atlantic.

France or bust: In January 1785, the first gas balloon to cross the English Cannel carries two passengers —and some important letters.

In November 1783 the first humans ever to fly soar in the high-and- mighty "Montgolfière."

Unbelievably, unpredictably, the result of an impulsive whim, we were ballooning—my husband, our friend, me, each of us wearing a broad grin and braced against the side of a sturdy, leather-girded wicker basket, watching our balloonist adjust the propane gas jets that warmed the air in the rainbow-hued balloon above our heads. Our pilot announced in a clipped British accent that we were about to lift off, and he told us to let him know if and when our ears popped. Then, suddenly, we were aloft, tracing our path by the shadow of the balloon as it floated across the desert.

The scent of citrus perfumed the air. Mauve-tinted mountains enclosed us in

silence. Like erstwhile lords of the domain, we surveyed the land below: furrowed fields with neat, perfect rows of ruby lettuce, groves of orange and lemon trees alternating with towering date palms, transformed by height into abstract patterns of tone and texture. The phrase "flight of fancy" was surely coined by a balloonist.

We had not come to Palm Springs, California, to balloon, but from the moment the inch-wide ad in a local *What's Doing in . . .* guide caught my eye there was never a doubt that we would. The spirit of Icarus dies hard. Besides, the homely, feet-on-the-ground virtues of woven wicker—its reliability attested to by generations of babies and wine and laundry—lent a reassuring sense of confidence.

Twentieth-century technology—a telephone answering machine—connected us to this 18th-century sport. A return call from the balloon pilot set the fantasy into motion; wind and weather permitting, we would rendezvous the following afternoon at three. The ride would last 45 minutes and cost $75 per person. And, the pilot advised, "don't dress too warmly."

Driving up to the launching site, we found only a small sign and an orange wind bag to mark the spot—an inconspicuous starting point for an adventure. And when a well-used pickup truck rumbled up the narrow, rutted road and passed our parked car, our threesome exchanged dubious glances. A few moments later the pilot, a.k.a. aeronaut or balloonist, emerged from the pickup and walked toward us, a 10-cent birthday-party balloon in hand.

"John Albury—greetings," said this blond Englishman with the air of David Niven in *Around the World in 80 Days*.

"That's our balloon," joked our friend.

John smiled, blew it up, tied it off, and sent it flying. Like most practitioners of his sport, John was an independent spirit, checking out the U.S. Weather Service report by sending up a trial balloon "to see which way the wind blows."

From the rear of the truck he and his crew mate removed the gondola—a wicker basket large enough to carry four passengers plus the aeronaut and his equipment: burners, two 20-gallon tanks of propane gas, an altimeter to monitor height, a variometer to indicate climbing and descent rates, and a pyrometer to measure internal temperatures at the top of the balloon. Next they hauled out a standing electric fan and finally, a large nylon sack containing the balloon.

The two men opened the bag and, hand over hand, began to pull out the balloon (also called aerostat or envelope), walking it across the field. On and on it came, a ribbonlike version of that tiny circus car from whose doors spill a seemingly endless parade of clowns.

"About the length of half a football field," my husband speculated.

Like an elongated multicolored pennant, the envelope lay limp across the ground until the fan blew life into it. Hot-air balloons (as opposed to gas balloons, which are simply inflated with hydrogen or helium) require a bubble of cold air to be forced inside, which is then heated by the burners to temperatures ranging from 185° F to 225° F. Temperatures higher than that can damage the balloon's polyurethane-coated nylon fabric.

IN THIS, THE OLDEST FORM OF FLIGHT, YOU GO THE WAY THE WIND BLOWS OR YOU DO NOT GO AT ALL.

"It's an old principle—hot air rises," said John. "You can always tell a racing aeronaut by his singed eyebrows." Many hot-air balloonists gladly take the heat of balloon races, challenging the winds and each other in meets here and abroad. But I was looking for a more modest brand of excitement my first time up.

"Have you been doing this long?" I asked John gingerly.

"About three hours," he quipped, turning to his partner for verification.

"More like a month, now, isn't it?" Both men laughed.

If I'd done my homework I'd have known that the prerequisite for a commercial ballooning license is a private license, granted to anyone 16 or older who has passed written and in-flight tests covering meteorology, aircraft radio, basic weather forecasting, and some physics, and who has had at least 10 hours of flying time. Commercial piloting tacks on another 25 hours, which must include 10 flights, two of them solo and one an ascent to 5,000 feet. John was qualified and then some—he had more than a thousand hours to his credit, easily amassed when spending half a year ballooning in the United States and the other half aloft over England and France.

Science aside, the fact is that ballooning is an art. Since you can't steer a balloon—it drifts with the wind—you must develop techniques for controlling direction by changing altitude. Wind blows in various directions and at various speeds, both at different heights and under different atmospheric conditions (for example, winds are calmest at dawn and dusk, gentle and regular in valleys, turbulent inside cumulonimbus clouds); hence the logic of sending up a trial balloon. In this, the oldest of all forms of flight, you go the way the wind blows or you do not go at all.

Fifteen minutes after John began, the balloon was filled, rising like a great monolith, tentatively at first, then smartly, as though it had a mind of its own. No wonder an astonished group of French peasants who witnessed the landing of an unmanned ancestral aerostat in 1783 raced to attack the "monster" with their pitchforks.

As we clambered aboard, a small group of spectators along the road cheered our departure while I busily filmed the moment. The balloon skimmed the earth and slowly, steadily, rose. For awhile it seemed we were barely moving, but the gradually receding figures and houses were diminishing into Monopoly-piece size. Each noisy blast of heat forced into the balloon from the propane burners sent us higher and hastened the removal of yet another layer of clothing. (Skeptical, I had ignored John's counsel on appropriate balloon wear.)

We had passed out of range of the launching site. Beneath us, but no longer visible, was John's crew mate, who was following our route in the truck. From time to time he and John spoke by radio—mostly about food.

"Could you stop and pick up a sandwich and soda for me? Have it waiting when we land—I'm starved . . . never did have lunch today."

"Might do. Anything special?"

"Ham and cheese."

"Right. Out."

I looked up. Inside the envelope the warm air danced, a shimmering pouf of diffuse color.

Though the sport's drama and romance haven't changed through the years, its equipment has. Today's balloonists have good reason to celebrate this bicentennial year of the first manned balloon flight—especially when they consider the smoke-filled, paper-lined sphere that started the whole business 200 years ago. Yet, despite the lesser technology, those pioneer flights were quite modern in concept, for ballooning was born out of

a desire for commercial gain. Two brothers, Joseph and Etienne Montgolfier, partners in a paper factory in Annonay, France, were seeking new avenues to augment their enterprise. Balloon research was in its infancy, and they reasoned that if they could develop a paper of low flammability for this new market, their business would boom.

They launched history's first balloon on June 5, 1783, and a second in September, this one from Versailles, with the royal couple and the entire French court assembled to watch the tethered craft send up a sheep, a duck, and a cock. What NASA did with the first monkey in space remains a mystery to me, but the sheep that flew for two miles and emerged unscathed was given a berth in the royal menagerie, a shining example of royal largesse.

Two months later, before a crowd of 400,000 gaping Parisians, Jean-François Pilâtre de Rozier and the Marquis François d'Arlandes became the first humans to take an untethered balloon flight (and thus the first human beings ever to fly), a 25-minute jaunt.

Competing with the Montgolfiers' straw-burning, smoke-powered aerostat in that same landmark year was the hydrogen-filled balloon built by a physicist named Jacques Charles. His *Charlière* first flew in September, landing to the rural greeting of pitchforks. Thereafter, balloonists took to carrying wine and champagne as a peace offering to excitable farmers, and the tradition remains to this day.

As ballooning became established, a series of firsts ensued: The first balloonist in the United States was 13-year-old Edward Warren, in 1784; the first woman aeronaut was a Madame Thible who, depending on your source, either recited poetry or sang as she lifted off; the first airmail letter, written by Ben Franklin's son to Franklin's grandson, was carried by balloon; and the first bird's-eye photograph of Paris was taken from a balloon.

Enthusiasm for ballooning akin to that now shown for the space program swept both the public and the military. "Trekkies," who can spout all the specs for the Starship *Enterprise*, may be surprised to learn that the first *Enterprise* was a balloon, which inspired the formation of the Union Air Corps during the Civil War.

But fashion is fickle. With the emergence of other forms of flight, along with some airborne fires that led to fears about ballooning's safety, the soaring interest in balloons plummeted and remained deflated for nearly 100 years. But in the 1950s, the creation of lightweight synthetic fabrics and compressed petro-

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WE'RE PLEASED TO ANNOUNCE that some things in America are still moving slow.

It takes a whole lot of just sitting for a batch of Jack Daniel's to gain rightful age. And, since there's no way to speed this process along, our employees get good at just sitting too. You may feel most things in America move too quickly today. But after a sip of Jack Daniel's, you'll be pleased some things (and some people) still take it slow.

CHARCOAL MELLOWED
DROP
BY DROP

Tennessee Whiskey • 90 Proof • Distilled and Bottled by Jack Daniel Distillery
Lem Motlow, Prop., Inc., Route 1, Lynchburg (Pop. 361), Tennessee 37352
Placed in the National Register of Historic Places by the United States Government.

Here comes

BRIGHT

A fresh new taste experience that outshines menthol.

It not only tastes fresher while you smoke.
It even leaves you with a clean, fresh taste.

7 mg. "tar", 0.5 mg. nicotine av. per cigarette by FTC method.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Getting Off the Ground

From Statesville, North Carolina, to Indianola, Iowa, to Visalia, California, the United States is blooming with balloons-for-hire—after all, pilots need some way to pay for the upkeep of their balloons. Look for the ones nearest you in the Yellow Pages.

If you want to balloon first-class, try the ultimate ballooning experience—Buddy Bombard's Great French Balloon Adventure. For $3,380 (excluding transportation to France), you can soar once a day for six days over the châteaus of the Loire Valley. Back on the ground, the adventure continues with castles and great French food. Contact: The Bombard Society, 6727 Curran St., McLean, VA 22102; (800) 862-8537 or (703) 448-9407.

Closer to home, you can take a domestic balloon vacation at The Balloon Ranch in Del Norte, Colorado. The only such resort in America, the ranch operates six balloons, and guests can ride every day. There's also tennis, rafting, horseback riding, and even the National Survival Game. The ranch is open from Memorial Day to Thanksgiving, and a week-long stay costs $560, plus $120 for each balloon flight. Contact: The Balloon Ranch, Star Rte., Box 41, Del Norte, CO 81132; (303) 754-2533.

Besides the Albuquerque Fiesta, spectators can catch other balloon meets celebrating the bicentennial. At The Great American Balloon Extravaganza, August 17–21, at Darien Lake, near Rochester, New York, some 100 balloonists plus other airdevils will race, sky dive, and otherwise strut their stuff. Contact: The Great American Balloon Extravaganza, Darien Lake, Darien Center, NY 14040; (716) 599-4501.

At the California Balloon Festival, September 16–18 in Visalia, near San Francisco, helium balloonists will attempt to fly over the Sierra Mountains. They will be soaring some 250 miles at altitudes up to 14,000 feet, the first time such a race has been tried in competition. Contact: California Balloon Festival, Box 5416, Visalia, CA 93278, or call (209) 625-2784.

The national balloon championship was being held in Indianola, Iowa, as we went to press; the international meet will be August 28-September 6 at Nantes, France.

Finally, for armchair aeronauts, there's *Ballooning Magazine*, published bimonthly by the Balloon Federation of America ($24 a year). A free sample copy is available on request. Contact: *Ballooning Magazine*, 2226 Beebee St., San Luis Obispo, CA 93401; (805) 544-9767

leum gases set the stage for a new rise in ballooning's popularity. This was ensured in the early 1960s, when government financing of a Navy research project brought dormant technologies up to date and a man named Paul (Ed) Yost substituted propane burners for the Montgolfiers' smoke, thus reviving a slumbering industry. Costs came down—today the average hot-air balloon sells for $12,000 to $14,000, and fuel costs about $15 an hour—and the essential allure of the sport reasserted itself.

Brian Lawler, editor of *Ballooning Magazine*, estimates that there are 2,500 hot-air pilots scattered throughout the United States, most of them in the Southwest. Once a year, hundreds of them gather at the International Balloon Fiesta in Albuquerque, New Mexico. This year's meet, the 12th—to be held October 1–9—is expected to top last year's assemblage of 500 balloons and half a million spectators.

"Imagine 400 acres with balloons lined up on their launching sites," rhapsodizes staff member Sandra Quinlan. "You wake up while it's dark to watch the balloons ascend at dawn, staggered so we can get them all up, and then you look up at the sky—clear turquoise—and it's filled with beauty and color."

Most of these pilots, however, are more interested in racing than in aesthetics. Of course, since balloonists can't

steer, they can't really race against each other. Instead, national and international meets test the pilot's ability to fly accurately. In the Hare and the Hound competition (known in the Southwest as Roadrunner and Coyote), a target balloon, the "hare," takes off 15 minutes before the chasing "hounds." The hound that lands closest to the hare is the winner. For the Parachute Drop, balloonists must fly over a large target cross several miles from their launch site and drop a marker as close to its center as possible.

At present, the American who best plays the wind vectors is Bruce Comstock, of Ann Arbor, Michigan. His uncanny ability to zip from a distance of five miles in the air to 10 feet above the treetops, gliding at times within inches of the target, has earned him five national championships.

At the Fiesta, the most popular competition is the Key Grab. After officials place the keys to a new car on top of a 50-foot pole, balloonists must maneuver their craft to within an arm's length of the pole and pluck off the keys. Whoever gets the keys gets the car.

Gas balloonists can't boast as many meets as their hot-air counterparts. But then, there are only about 250 such pilots in the world—partly because the *Hindenburg* gave hydrogen a bad name, and partly because the alternative fuel, helium, is expensive; at 20 cents a cubic foot, filling a balloon costs about $2,000.

The most prestigious gas-balloon event is the Gordon Bennett Aeronautic Cup, named after its millionaire sponsor. The race—which was held in various countries from 1906 to 1938, then resumed in Long Beach, California, in 1979—measures the distance from launch site to first touchdown; the record in that competition is 1,250 miles. But the greatest recorded gas-balloon flight was made by *Double Eagle V*, a 5,000 mile transpacific journey.

The only hope hot-air balloonists have of matching these feats rests with solar power. Several solar models have flown successfully, including one that contained a black balloon within a transparent one. Radiant heat given off by the inner envelope powered the outer balloon. But despite their fuel limitations, hot-air balloons, with extra tanks lashed to the sides of the gondola, have flown as high as 55,000 feet, as far as 726 miles, and as long as 29 hours.

We were about 28 hours short of that record, but I had lost track of time. To a first-time passenger, ballooning seems as safe and secure as a Disney ride. Indeed, says *Ballooning*'s Lawler, "I don't know of a single instance when a balloon's failing caused a fatality." But there are dangers. "The pilot never relaxes," explains Lawler, "never lets his guard down in checking instruments, fuel supply, and watching for deadly power lines." Which explains why, during descent, as I serenely meditated on the paradox of daring nature while being at one with it, John was all business.

"I think we'll land just the other side of the road." John was on the radio with his mate.

"How can you tell?" I asked.

"We're gliding just right. Now before we land, bend your knees, in case we bounce a bit."

Just as we touched down, John pulled the rip cord, opening a vent at the top of the balloon and collapsing the envelope so we wouldn't be dragged along the ground. We eased to a halt a few feet beyond the shoulder of the road, about six miles from where we'd started. No thumps. No bumps. Just a truck, John's lunch, a balloon-shaped enamel pin as a memento, and, of course, champagne. Enough to keep us floating.

Elaine B. Steiner is a widely published freelance writer.

HISTORICAL BALLOONS: F. LHOSTE; BETTMANN ARCHIVE; *DOUBLE EAGLE II*, UPI; ALL OTHERS, SYGMA. OTHER PHOTOS BY R. KRUBNER/H. ARMSTRONG ROBERTS

MILNES
COLLECT
$200.00 SALARY

LOST IN THE
OZONE
COLLAGE BY
JOHN CRAIG
This collage is truly an example of circular reasoning, which you'll discover, in a round-about way, when you figure out what all the images have in common. After you've done that, see how many of the 68 images you can identify. If you find yourself going around in circles, well . . . that's OK.
Answer Drawer, page 71

SECOND GUESSING

A QUIZ TO CHECK YOUR INNER CLOCK

BY MONNY SKLOV AND BOB SPITZER

★☆

Suppose someone took on the gargantuan task of eating all the food ever produced in the United States. How long would it take? A matter of days? Obviously not. Years? Doubtful, no matter how fast the person ate. Common sense dictates that it would take centuries for even the world's fastest eater to put away that much chow.

Questions like this and the 20 on these two pages will propel you into the fourth dimension and measure your intuitive perception of time, size, speed, and distance. Each question is to be answered approximately, by choosing the most suitable unit of time from among the following:

Seconds	**Days**	**Years**
Minutes	**Weeks**	**Decades**
Hours	**Months**	**Centuries**

Pencil and paper are forbidden. Instead, use intuition, experience, and rough mental calculations to arrive at a "guesstimate" of the correct answer. Give yourself 5 to 10 seconds for each. In all questions, assume nonstop activity with no unspecified barriers (and in some questions, like the one above, you'll need to suspend disbelief as well).

SCORING: The lower your score, the better. For each correct answer, your score is 0. For each incorrect answer, your score is the number of units by which you vary from the correct solution. (For example, if you answer "months" and the correct response is "seconds," your score on that question is 5, since you're five units away from the correct answer.) Rate yourself as follows:

0-10	Years ahead of your time
11-20	"Hour" hero!
21-30	Nine days' wonder
31 and over	Running late

Answer Drawer, page 72

1

With your rubber flippers on, how long would it take to swim around the equator?

2

You have just won a billion dollars in the Super-Zorch Megabucks Lottery. You can't collect interest on your money, but that's OK. You still plan on spending $3,000 a day until the money runs out. How long will it take until you have spent your last two bits?

3

How long would it take you to write the first and last names of one million people?

4

You have a loud voice. In fact, your voice is so loud that when you yell "hello" from New York City, a friend in Los Angeles can hear you. After you yell "hello," how long does it take before your friend hears your voice?

5

What is the average life-span of an ordinary housefly?

6

A cement company has just built a sidewalk from your front door to the sun. After you've put on your hiking boots, how long will it take you to walk to the sun?

ILLUSTRATION BY MICHAEL WITTE

7

How long would it take you to count all the beans in an eight-ounce can of baked beans?

8

One by one, how long would it take you to pull out every hair on the average human's head? (Ouch.)

9

Congratulate yourself. You are moving to Los Angeles to become the Regal Hoo-hah of the "I Love Los Angeles" fan club. Your first job is to award membership medallions to each of Los Angeles's 3 million people.

If you shake hands very fast and you don't spend much time chatting, you can present one award every 10 seconds. How long will it take you to adorn the new members?

10

How long would it take Samuel Slugg, a Parisian snail, to climb the Eiffel Tower?

11

You're relaxing on the moon and gazing toward Earth, whence a friend is supposed to send you a signal by special, very powerful flashlight. How long after your earth-bound friend turns on his flashlight will you be able to see the light beam?

12

Every day for 18 years, you take one foot of 8mm film of your son Howie. Today is Howie's 18th birthday, and you're going to show the film in its entirety. How long will it take to run?

13

How long would it take to walk across the United States and back?

14

You are ordered to deliver a secret document to the exalted Chief Belzap, who lives just a few miles past Jupiter. If you travel from Earth to Jupiter at the speed of light, how long will the chief have to wait?

15

You're sunning yourself on the roof of a building that is as tall as Mount Everest, which is more than five miles high. If you were to drop a bottle of suntan lotion from the top of this building, how long would it take the bottle to hit the street below?

16

If you throw a ball straight up into the air as high as you can, how long will it take before the ball hits the ground?

17

How long would it take you to read all the books in the Library of Congress?

18

How long does it take for a 2½ inch birthday candle to burn itself out?

19

You own a square mile of land. If one-tenth inch of rain falls on your land and you catch all the water before it hits the ground, how long will it take you to drink all the water?

20

A fellow named Seymour is bitten by a tropical bug. He contracts a very rare disease called the heebie-jeebies. When Seymour has a spell of the heebie-jeebies, his only symptom is a slight temperature.

However, it is the nature of the disease that the 18th spell is fatal! If the amount of time between the first and second spells is one day, and the amount of time between the second and third is two days, and the amount of time between the third and fourth is four days, and the amount of time between each of the remaining spells continues to double, how long will Seymour live?

Monny Sklov, a Ph.D. in psychology specializing in statistics, is the Director of Academic Computing at Hunter College in New York. Bob Spitzer, who lives in Los Angeles, is an actuary and part-time inventor. They've been trying out questions like these on each other since their high school days in California.

"...COME IN, MOONSWEEPER...ARE YOU THERE?...COME

"...Star Command to all video game players...we have confirmed reports that U.S.S. Moonsweeper was attacked by an alien transport... Moonsweeper last sighted clearing aurora flares on way to rescue Malanium miners on Lunar Alpha Red...she lowered shields, located Alpha Red, and began final approach...we do not know if Moonsweeper was forced into a mining tower

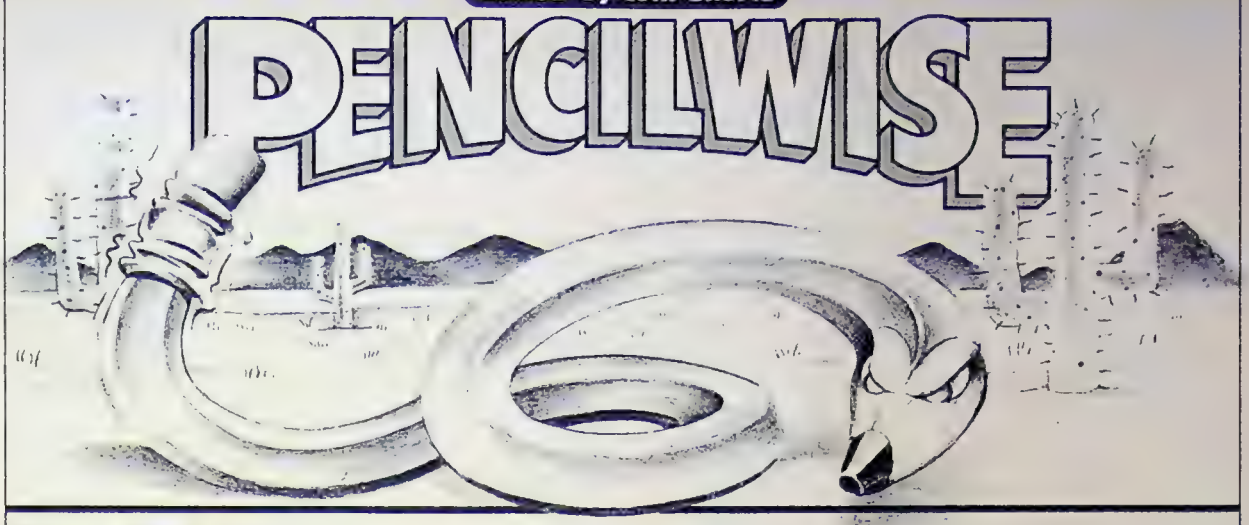
...or was shot down heading for acceleration rings...we do know several enemy destroyers were shot down before communications went dead...proceed to nearest video store and attempt to make contact with Moonsweeper...situation critical...repeat...situation critical...over..."

MOONSWEEPER™ BY IMAGIC

For Atari® 2600.™ Soon for Atari® 5200,™ Intellivision,™ ColecoVision,™ VIC-20,™ Atari® Computers and TI-99/4A.

Edited by Will Shortz

PENCILWISE



The Spiral ★★

by A. Braine

This puzzle works in two directions. The spiral's Inward clues yield a sequence of words to be entered counterclockwise in the spaces from 1 to 100. The Outward clues yield a different set of words to be entered clockwise from 100 back to 1. Fill in the answers, one letter per space, according to the numbers beside the clues. Work from both directions to complete the puzzle, and have many happy returns.

Answer Drawer, page 70

INWARD

1-4 Moniker
5-12 ___ on rye
13-18 ___ acid (oak bark extract)
19-26 Cigarette substance
27-33 Obvious, as a mistake
34-40 Choir voice
41-46 Mentally doddering
47-51 Dirt
52-60 Neighbor of Mexico
61-66 ___ and feathered
67-73 Archenemy
74-77 Kind of express or tail
78-82 *Love Story* author
83-90 Reading ability
91-95 Small, deadly snake
96-100 Wicked forces

OUTWARD

100-93 Split off, as wood
92-86 ___ center (mothers' aid)
85-79 Farming
78-71 Story summary
70-66 Change
65-60 Mistakes
59-56 Rather poor, as an excuse
55-50 Instructed
49-42 Source of vital assistance
41-37 Submarine equipment
36-28 After birth
27-22 ___ Mussolini
21-12 Home of the Bengals and Reds
11-7 Shopping centers
6-1 Tarzan, for one

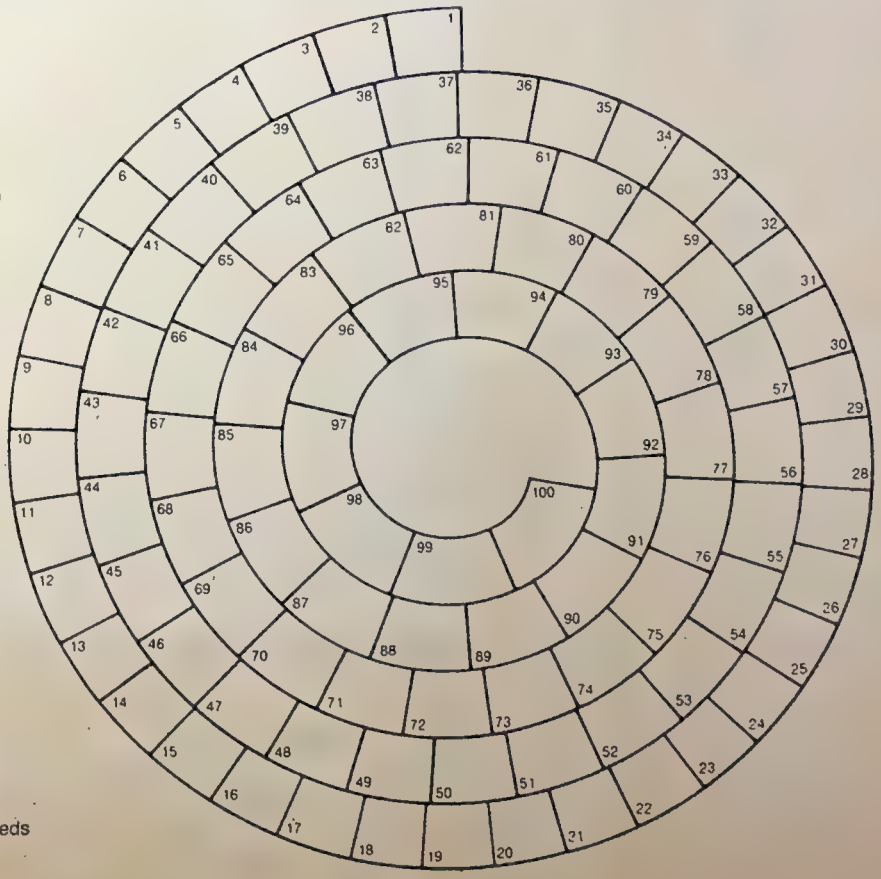


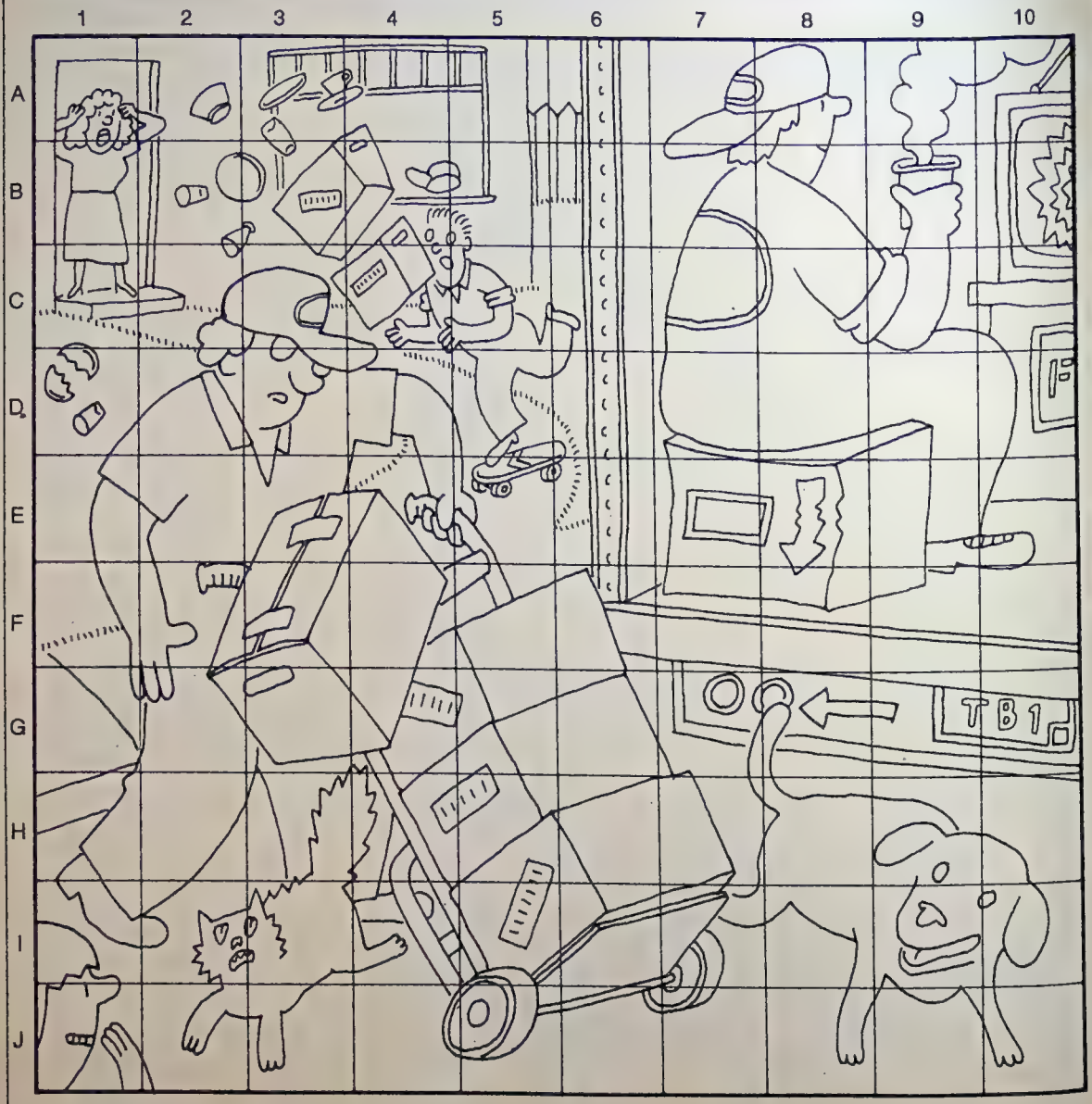
ILLUSTRATION BY RICHARD TIMPERIO

Moving Picture ★

by Tom Bloom

It's moving day, and—wouldn't you know it—the movers have already misplaced eight boxes. Each of these boxes, shown at the bottom of the page, is identical to one of the squares in the main picture above it. Of course, some of the boxes have been turned on their sides or flipped upside-down in the confusion of moving, so look sharp. Where are the boxes duplicated in the picture?

Answer Drawer, page 68



Re: Collection Recollection ★

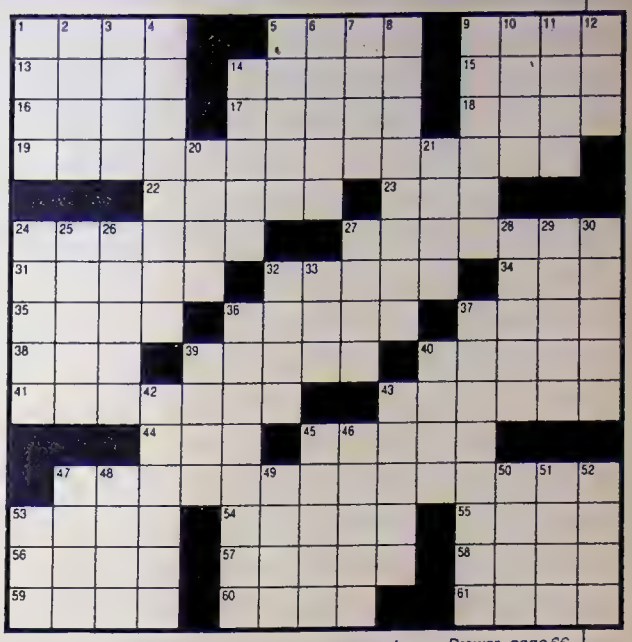
by William Lutwiniak

ACROSS

1 Mideast oil cartel
5 Stetsons
9 Color of Elvis's suede shoes
13 Talk-show host Jack
14 Army doctor
15 Bathtub residue
16 Realty unit
17 Set ___ (make wedding plans): 2 wds.
18 Choir voice
19 Start of a quip: 3 wds.
22 Climbing plants
23 Woodsman's tool
24 Desert garment
27 Dryness
31 "Illegal" resident
32 Deserve
34 Scottish "no"
35 Duck's pool
36 "Reach for all the ___ you can get!"
37 Atlas contents
38 Fish eggs
39 The underworld
40 Gift receiver
41 Part 2 of the quip: 2 wds.
43 Sweethearts
44 Harp on
45 Bangor's state
47 Part 3 of the quip: 3 wds.
53 Eventful tale
54 On edge
55 Director Kazan
56 Roy Orbison's "___ the Lonely"
57 Great Lakes Indians
58 Close at hand
59 House ___ and Means Committee
60 Take a break
61 Blabbed

DOWN

1 Fiery gemstone
2 Walk to and fro
3 Make money
4 Added to one's account
5 Property line shrubbery
6 President John Quincy
7 Yugoslav leader
8 Screenwriter's story line
9 Made donkey sounds
10 Lively tune
11 "Do ___ others . . ."
12 Self-esteem
14 ___-the-moon
20 "Terrible" czar
21 The way out
24 Film director Frank ___
25 A bit unsociable
26 More exquisite
27 ___ and sciences
28 Empty-headed
29 Narrow to a point
30 "Okay," "certainly," "uh-huh"
32 TV newsman Roger ___
33 Suffix with Japan and Peking
36 Mafia hood
37 Section of a symphony
39 Cure, as a wound
40 Finished
42 Dental fittings
43 Citrus fruits
45 Short, short skirts
46 Black ink entry
47 He played Jose Jimenez
48 More than homely
49 Not yonder
50 Butter substitute
51 Money of Iran
52 Football distance
53 Spread, as seeds



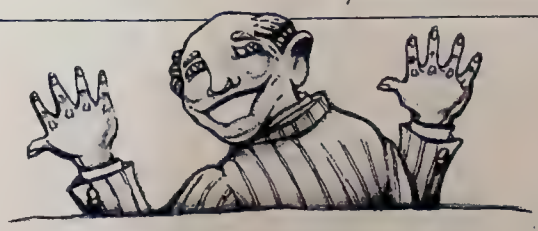
Answer Drawer, page 66

Righting Lesson ★☆

by Robert Goldberg

In this quiz, *every* answer is a right answer, because the answer to each clue is a word, phrase, or title containing the word RIGHT. For example, the clue "Assistant" would be RIGHT-HAND MAN, while "Ideal beau" would be MR RIGHT. Consider yourself all right if you can answer 10 correctly.

Answer Drawer, page 69



1. First 10 Amendments _____
2. 90° bend _____
3. Writer's protection _____
4. Cost-guessing TV game show _____
5. Hip "You said it!" _____
6. Baseball position _____
7. Kind of piano _____
8. 1964 legislation _____
9. Pedestrians have it _____
10. Cartoon Mountie _____
11. Saying about multiple misdeeds _____
12. Candid _____
13. Famous Henry Clay line _____
14. Tom Wolfe book _____

ILLUSTRATION BY CAROLE POPOLO

America Sings! ★

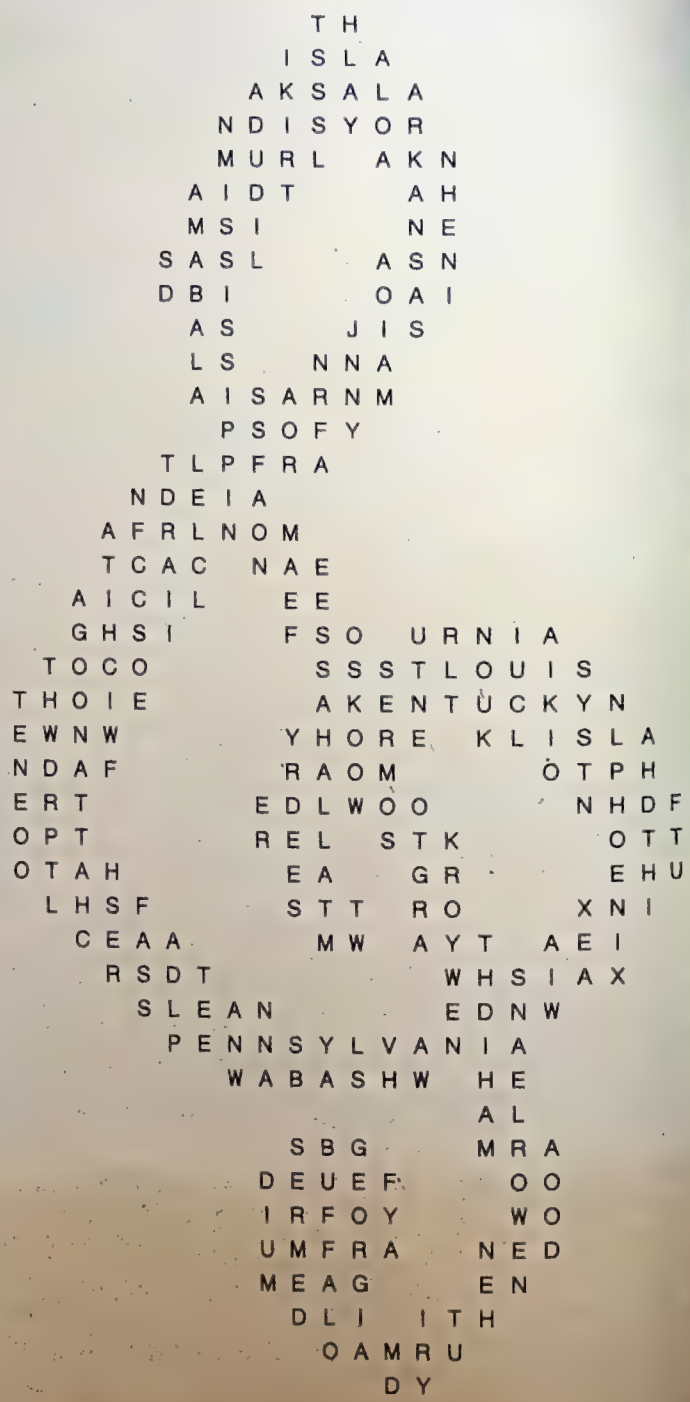
by Edith Rudy

A Music/Geography Word Search

When we came up with this word search, we weren't just whistling Dixie—we were in fact humming music from all over America. Each of the 25 song titles beside the grid is missing the name of a U.S. city or state. These missing place names are hidden within the musical clef. As always, each answer will read horizontally, vertically, or diagonally, but always in a straight line. The numbers in parentheses after each title indicate the number of letters in the answer. Finding all the answers is a noteworthy feat, but those who'd like a word list will find it on page 71.

Answer Drawer, page 69

1. "Yellow Rose of _____" (5)
2. "Moon Over _____" (5)
3. "North to _____" (6)
4. "The _____ Cannonball" (6)
5. "Blue _____" (6)
6. "Shuffle Off to _____" (7)
7. "Sweet _____ Brown" (7)
8. "By the Time I Get to _____" (7)
9. "Stars Fell on _____" (7)
10. "_____ Lineman" (7)
11. "Meet Me in _____, Louis" (2,5)
12. "The Sidewalks of _____" (3,4)
13. "Do You Know the Way to _____?" (3,4)
14. "The _____ Traveler" (8)
15. "_____ Lulu" (8)
16. "My Old _____ Home" (8)
17. "The Little Old Lady From _____" (8)
18. "The _____ Waltz" (9)
19. "_____ Dreamin' " (10)
20. "The Battle of _____" (3,7)
21. "_____ Choo Choo" (11)
22. "_____ Queen" (11)
23. "_____ Lassie" (11)
24. "_____ 6-5000" (12)
25. "I Left My Heart in _____" (3,9)



Boxes 'n Boxes ★★

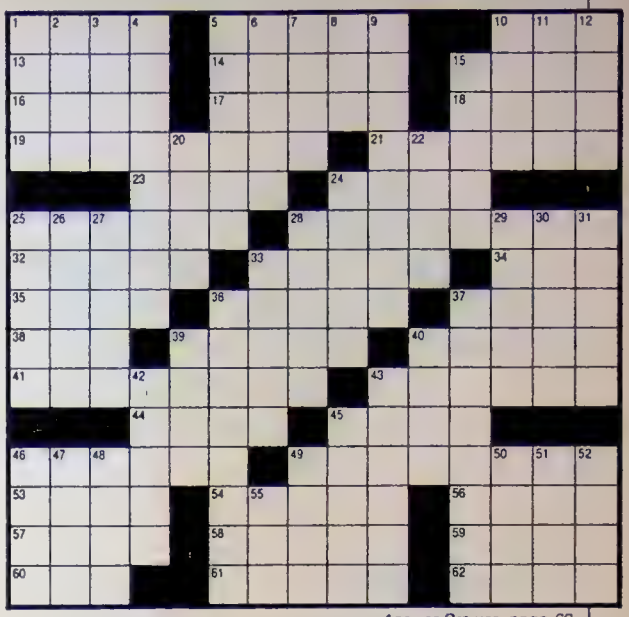
by Karen Hodge

ACROSS

1 Reason to leave the kitchen?
5 Feathery plants
10 Belfry resident
13 Chancellor Bismarck
14 Spring ___ (burst): 2 wds.
15 Pan's opposite
16 ___ about (approximately): 2 wds.
17 Poke with an elbow
18 Migrant worker
19 By the rules: 2 wds.
21 December 31 gathering place: 2 wds.
23 Buffalo's lake
24 Part of a *drame*
25 Hoedown: 2 wds.
28 Honest fellow: 2 wds.
32 Turns to mush
33 Kind of hand or crust
34 "Right you ___!"
35 Son of Seth
36 Prayer joints?
37 Colorless
38 Blonde shade
39 Pretend
40 Small grove
41 Brochures
43 Lady "in distress"
44 Running gait
45 *Eins und zwei*
46 Osmond and Curie
49 Quilt components: 2 wds.
53 *Godfather* actor James
54 Warmly lit
56 Grand amount
57 Certain sail set: 2 wds.
58 Nancy Drew's creator, Carolyn ___
59 German composer Carl
60 Lair
61 Arabic prince
62 Waiting room call

DOWN

1 Go by foot, with "it"
2 Sicilian volcano
3 Yours, in Tours: 2 wds.
4 Downpours
5 Comedienne Flagg
6 Steer clear of
7 Kremlin site: 2 wds.
8 Has-been horse
9 Artist's early drafts
10 Make bread
11 Rara ___
12 Draftsman's tool: Var., 2 wds.
15 Young Montague
20 Curves
22 "Take ___ leave it!": 2 wds
24 Skier's Mecca
25 Nutritious dinner: 2 wds.
26 Not too bright
27 Hilo hello
28 Recent TV sitcom: 2 wds.
29 Covers for campers
30 Make a clean slate
31 Yankee's counterpart
33 Join forces
36 Souvenir
37 Supremacy
39 Iceberg
40 City of Normandy
42 Highlander's dance
43 Bureau part
45 Pilotless plane
46 E, to Einstein: 3 wds.
47 Swiss river
48 Ruination of some picnics
49 Joviality
50 Time past
51 Algebra calculation: 3 wds.
52 Kind of drink or shoe
55 Ring adornment



Answer Drawer, page 69

Shrink Words ★☆

by Matt Dickey

The object of this puzzle is to reduce each "Shrink Word" to a one-letter word in the fewest steps. A step consists of either the deletion of a single letter to make a new word (no scrambling) or the replacement of one letter by another to make a new word. For example, ACCEPT can be shrunk in eight steps as shown below. Legitimate one-letter words are A, I, and O. Proper names and obsolete words are not allowed. Multiple answers may be possible.

Answer Drawer, page 70

Example: ACCEPT (8 steps)

ACCENT
ASCENT
SCENT
SENT
SET
SAT
AT
A

1. CONCERTO (9 steps)

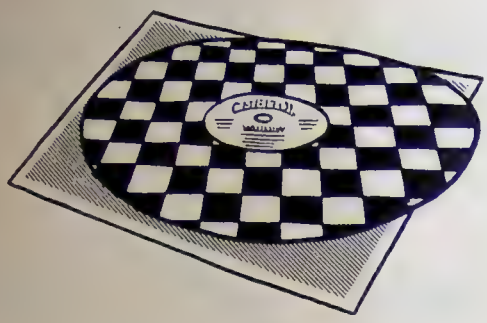
2. STRAGGLED (11 steps)

3. LIGHTENING (14 steps)

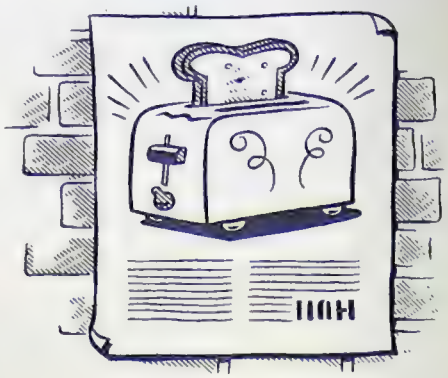
Illustrated Hinky-Pinkies ★☆

If the snakes that slithered onto the Ark were "Noah's boas," and a bearded gnome is a "hairy fairy," then can you tell what pair of rhyming words is suggested by each of the following drawings? The length of the two words in each answer is indicated by the number of dashes shown.

Answer Drawer, page 70



1. _____ _____



2. _____ _____

3. _____, _____

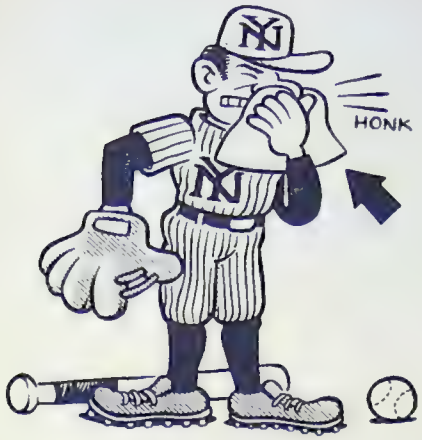
4. _____ _____

5. _____, _____

6. _____ _____

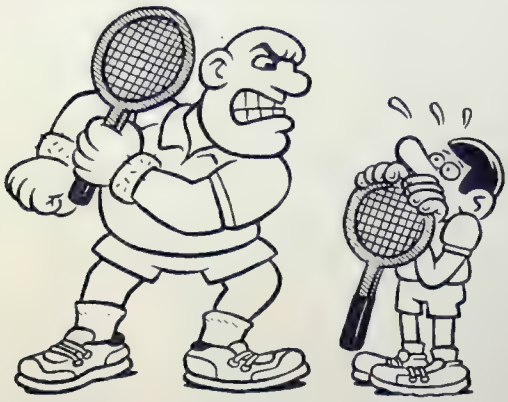
ILLUSTRATIONS: BY DAVID COLLISON

by Robert Leighton

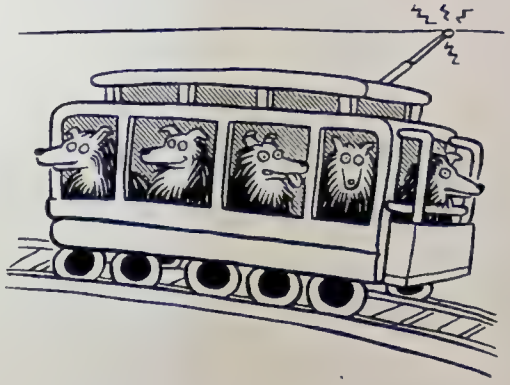


7. _____ _____

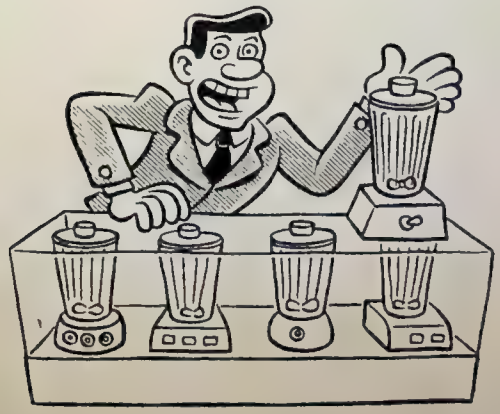
8. _____ _____



9. _____ _____



10. _____ _____



11. _____ _____

12. _____ _____

Dszquphsbnt! ★☆

by Dick Crawford

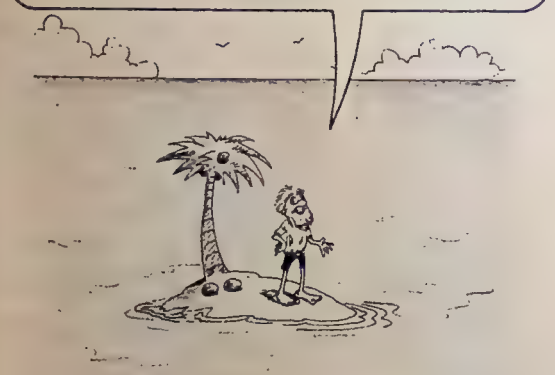
Below are seven messages, consisting of pithy sayings, fascinating facts, and a cartoon gag, which have been translated into simple code alphabets. Letter substitutions remain constant throughout any one cipher, but change from one cipher to the next; the level of difficulty increases as you progress. An asterisk (•) indicates a proper noun or adjective.

Clues are given at the bottom of the page to provide assistance if you need it.

Answer Drawer, page 68

1. CRYPTOON

DV'E G HRKFAM D IGCAK'V WRKA OMGQJ, EVMGKFAF GBRKA GBB VIAEA JAGME DK VIDE RBF *CDOVRMDGK PGKEDRK.



2. INFALLIBILITY

"URS NKXSM P DMNA, URS QNMS P XPTUMETU URS ILQPKPLM XNJUMPZS URLU LDS OMPZDT APTXNQ."

*R. *K. *QSZJWSZ

3. SELF-EVIDENT

XGOMGD LWM SDZKDCDV X TVOIWKXHEKVH IXG WDZT WKF TEMSXSZO VWMAZR WXCD WKV WDXR DBXFKGDR.

4. PERSPECTIVE

*NOVTYXI *XPIHOKYIT, FZ PFA YE DIIKU EF JI OZ FXEFRIZOTYOZ: "ZFE JOS, XFZUYSITYZR EPI OKEITZOEYHI."

5. THE USES OF ADVERSITY

R YKCBRFE RUVOEB VQ VHHVLFBFVE YRE PK R NCKRB ZKTH BV R URE. MFBKL CFLK RNRFELB, EVB XFBZ, BZK XFEW.

6. STEPLADDER OF SUCCESS

UNNCMHF RAXB HAON JA JGN FBMHQOJAHN VYR GNEC RAX FNJ YGNYQ MH RAXB DABU, AB MJ VYR FNJ RAX Y OGABJ HAON.

7. RULE #1

BJ LMFENBVFNC OSJZCML VI DJJ DJRUE DJ ZM IJCPMG ZK ZSRDM IDSMBUDE NBG VUBJSNBFM.

CLUES

Cipher 1: Ciphertext DV'E represents the word IT'S.
Cipher 2: Ciphertext URS and URLU are common cryptogram patterns for the words THE and THAT.
Cipher 3: The commonest letter in this cipher is E; the commonest initial is H.
Cipher 4: The letter third from the end of all the long words is I.
Cipher 5: The three-letter words in this cipher are (in no particular order) THE, MAN, CAN, and NOT.
Cipher 6: Ciphertext RAX and RAXB are common cryptogram patterns for the words YOU and YOUR.
Cipher 7: Ciphertext DJ and DJJ represent the words TO and TOO.

ILLUSTRATION BY ROBERT LEIGHTON

How do you enjoy Sambuca Romana when you run out of coffee beans?

Con Mosca
1 oz. Sambuca Romana
3 roasted coffee beans
Float coffee beans on top.

White Cloud
1 oz. Sambuca Romana
Club soda
Pour over ice
in tall glass.

Romana Caffe
1 oz. Sambuca Romana
½ cup hot coffee
Top with sweetened whipped cream.
Dust with grated nutmeg.

Chocolate Chip Sambuca
1 oz. Sambuca Romana
½ cup chocolate chip ice cream
Blend and serve or freeze until serving.

Sunny Sam
½ oz. Sambuca Romana
1 oz. vodka
Orange juice
Pour over ice in 8 ounce goblet.

Reunion (for 2)
1 oz. Sambuca Romana
1 oz. vodka
12 fresh strawberries
6 oz. orange juice
½ cup crushed ice
Mix ingredients in blender until almost smooth.

The traditional way to drink Sambuca is Con Mosca. But if you're out of coffee beans, try one of these other drinks. And then write for our original Sambuca Romana recipe book. Sambuca Romana 84 Pt.

SAMBUCA ROMANA

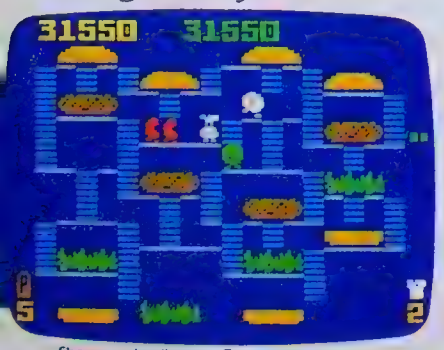
Imported by Palmer & Lord, Ltd., Syosset, N.Y. 11791.

You've got what it takes.
salem
spirit
ULTRA LIGHTS: 5 mg. "tar", 0.5 mg. nicotine. LIGHTS: 10 mg. "tar", 0.8 mg. nicotine.
KING: 17 mg. "tar", 1.3 mg. nicotine, av. per cigarette by FTC method.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.
Share the spirit.
Share the refreshment.
Menthol Fresh
Salem
MENTHOL FRESH
Salem
LIGHTS
Menthol Fresh
Salem
ULTRA LIGHTS

TO BEAT OUR NEW HOME VIDEO GAME, YOU'VE GOT TO MOVE YOUR BUNS.

If you've been waiting for the home version of one of America's hottest arcade games, your order is ready. Introducing BurgerTime™* from Mattel Electronics. For your Intellivision,® Atari® 2600, Apple® II,** Aquarius™** or IBM® Personal Computer.



Shown on Intellivision. Game varies by system.

Your job is to climb up the ladders and assemble an order of giant hamburgers. But you've got to do it fast because you're being chased by killer hot dogs, sour pickles and a very nasty fried egg.

Good thing you've got your pepper shaker. One shake and they're stunned.

But just make sure you don't run out of pepper. Because you know what happens then.

You stop making lunch. And you start becoming it.

BurgerTime™ FROM MATTEL ELECTRONICS®

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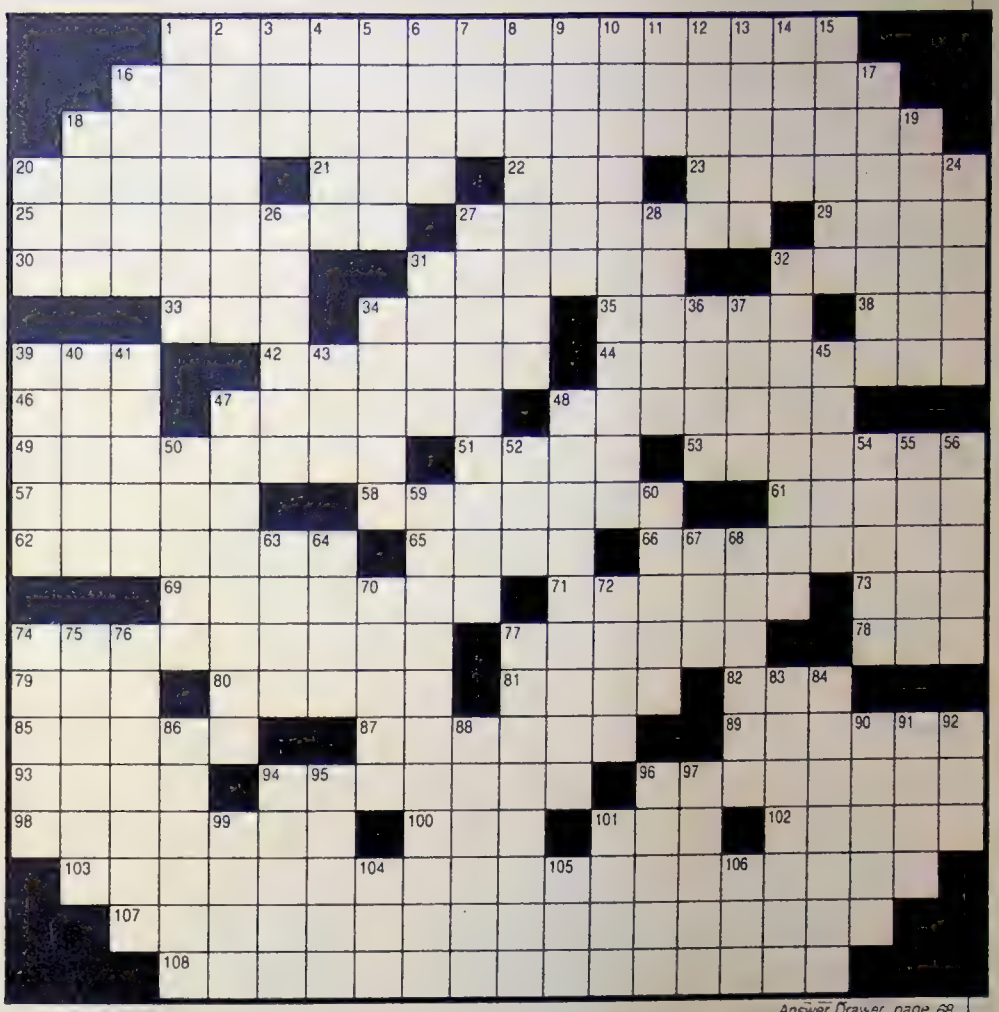
Ace Construction ★★★

by Merl Reagle



Answer Drawer, page 68

ACROSS

1 They know an ern from a tern
16 South-of-the-border vacation spot
18 Stick-to-itiveness, perhaps
20 Blizzard bit
21 Curious animal?
22 Not "dis"
23 Crude shelters
25 Volkswagen's route
27 North Carolinian
29 Basil or sage, in Rome
30 Dirty again
31 Soviet space station
32 *Chinois* or *Indien*, e.g.
33 Amtrak stop Abbr.
34 France, once
35 Giant birds of South America
38 El ___
39 Command to Rover
42 Sheds feathers, British-style
44 Danger signals
46 Ky. neighbor
47 Tuna-related fish
48 Londoner's summer resort
49 F-16 sites
51 Jacob's wife
53 Hugs, in a way
57 Olympic honor
58 Puffed-up person
61 Host
62 Pleasingly pastoral
65 Actor Richard
66 Antipathy
69 Waiting-room announcement
71 Purify, as petroleum
73 Code letters?
74 Shakespeare, for one
77 Tacked up, as notices
78 Mach-ing bird?
79 Supreme Babylonian god
80 Hit ___ (run into trouble)
81 Seance noises
82 Fire retardant: Abbr.
85 Calif. football player
87 Elixir
89 Lizard's habitat?
93 Copycat
94 Irregular sale items
96 Pickpocket's target
98 Bad dream while awake
100 Script ending?
101 Pale
102 Actor Zimbalist
103 Reagan in '80, e.g.
107 Big event for Betamax buffs
108 Chumley's chum, in cartoondom

DOWN

1 Clock occupants
2 Melted cheese dish
3 Pindaric poem
4 Louis Armstrong
5 Novelist Wilson
6 Float
7 Eye, in Ensenada
8 *Love Sidney*'s Tony et al.
9 Like Poe's midnight
10 Bittersweet victories
11 TMer's syllables
12 Weak, in Paris
13 Lead the pack
14 Costa ___
15 Tableaux
16 Early Scandinavians
17 Biggest bird
18 Turn on a pivot
19 "Amen!"
20 ___ and away
24 Gobi terrain
26 Los ___ (Manhattan Project site)
27 Redundancy
28 Atmosphere, with "the"
31 One shaker
32 So to speak
34 False front
36 Upper hand
37 Bates or King
39 Turbaned seer
40 Like some school walls
41 Attendance book notation
43 Washington bill
45 Cold warriors?
47 Sports franchise
48 Thoroughfares
50 Marty of the Jefferson Starship
52 Greek vowel
54 Litmus reddeners
55 Company "cogs"
56 French legislature
59 Force behind the Force
60 First family of 1910
63 Followers' suffixes
64 San Francisco columnist Herb
67 Compete
68 Ultimate goal
70 Man's "shadow"
72 Catch sight of
74 Dieter's lunch
75 Comparable
76 *Exposed* co-star
77 Make-believe
83 California prison
84 Nickel emblem
86 Place needing protection?
88 Swamp
90 Up, on a Spanish map
91 Type of club
92 Actor O'Brien: Abbr.
94 Gagwriter Robert
95 French actor Alain
96 Niger-Congo language
97 Quick-reference aid
99 Department of France
101 Bulb unit
104 Stoic's symbol
105 Bee chaser?
106 British verb ending

Weighs and Means ★★★

by Mike Shenk

A Mathematical Logic Problem

Professors Graham and Pound were just beginning their excavation of King Itzunkhamen's tomb when they uncovered a room containing 14 golden icons.

"I suggest we each take seven icons," said Graham.

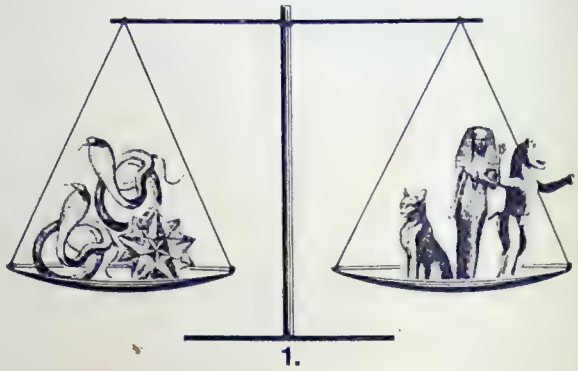
"No, I believe it would be fairer if we each took the same total weight," argued Pound. At which point a prolonged debate began over the proper method of division.

Several hours later it occurred to the two archeologists that perhaps both positions could be satisfied at once. Taking an antique balance from a corner of the tomb—the only weighing instrument available to them—and a one-pound weight from their bags, they made five weighings (as shown below) before the balance broke.

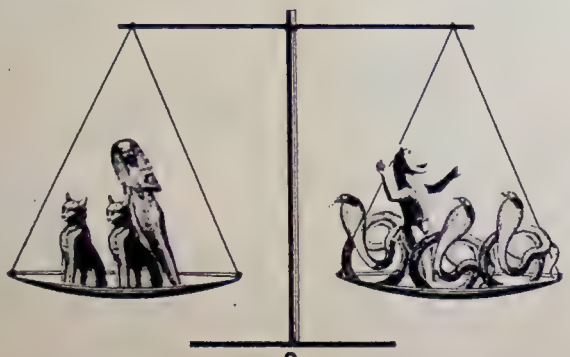
Still, from the information gathered in these five weighings, the professors were able to solve their problem. Given that all identical icons are also identical in weight, can you determine (a) the actual weight of each icon, and (b) the correct division?

Answer Drawer, page 66

The Icons

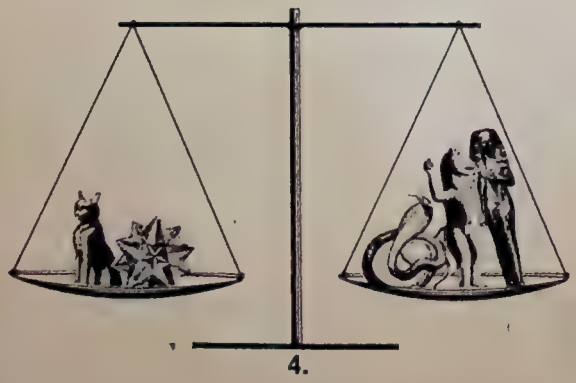


1.

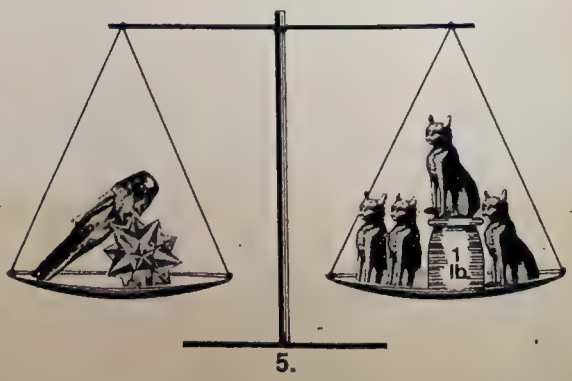


2.

3.



4.



5.

Cryptic Crossword ★★★

by Mike She

The Warm-Up Puzzle at right contains all the basic types of clues you're apt to encounter in a cryptic crossword. Like all cryptic clues, each contains two parts: a direct or indirect definition of the answer and a second description of the answer through wordplay. The first step in solving a cryptic clue, and a great part of the fun, is to determine the dividing point between the parts. Consider some examples:

"Country club pier broken (8)." This is an example of an anagram clue. The word "broken" suggests a mixture of the letters of the preceding words CLUB PIER to get the answer REPUBLIC (defined as "country"). An anagram clue always contains a word or phrase (like "crazy," "reorganized," or "in a heap") that suggests mixing or poor condition.

"Pastry filled with meat for a beach cookout (8)." The word CAKE ("pastry") is literally filled with LAMB ("meat") to form the answer CLAMBAKE ("a beach cookout.") This is called a container clue.

"Hawaiian garland certainly is for fun (7)." Here you must join two short words to form the answer: LEI ("Hawaiian garland") and SURE ("certainly"), yielding LEISURE ("for fun"). This is an example of a charade clue.

"Reportedly filches metals (6)." This is a homophone clue. The answer STEELS ("metals") sounds the same as STEALS ("filches"). The word "reportedly" suggests the homophone. Other homophone signals include "we hear," "by the sound," and "oral."

Other tricks of clue-solving have been explained in previous issues. If you are new to cryptic crosswords, start with the Warm-Up Puzzle at right and refer to the Answer Drawer for explanations.

ACROSS

1 In Capitol, I assaulted a Congressman (10)
6 One married in reverence (4)
10 Winter rainstorm veils landscape (7)
11 Nonbeliever present during robbery? (7)
12 Required reshaping of sea inlets (9)
13 Bit of movie viewed in hearing (5)
14 Rope from end of boat at port, perhaps (5)
16 Otherworldly experience ultimately links with the actual (8)
19 Let air out of leaky tire, in performance (8)
21 In former times, a Roman meal (5)
23 Bo Derek movie has satisfactory representation (5)
24 Shaky denial about "acid" left for the Rolling Stones? (9)
26 Part of the Capitol is changed around—about time! (7)
27 Frying pan collection contains poison (7)
28 Bunch of cattle listened to sound (4)
29 Party giver's entertainment's ending in bloody Halloween tale (5,5)

DOWN

1 Hospital residents make knots in trousers (8)
2 Strangely rely on Stradivarius's first stringed instruments (5)
3 Cuckoo in a tree is a fledgling? (7)
4 Pleased bears in Asia, for example (9)
5 Use a facial cover, say (5)
7 Frothy waves crashing with gulf rising (9)
8 Taxes due—it's terrible (6)
9 He pursues others in frantic search (6)
15 Create ski jumps for winter sportsman (3,6)
17 Mischievously dishonest pleasure seekers (9)
18 Records an attempt to make a wall hanging (8)
20 Sheets of poetry about autumn's end (6)
21 Greek character cuts up flower parts (7)
22 It hardens street over bridge (6)
24 Heals wound from dog's strap (5)
25 Big-looking houses where some Alaskans live (5)

Warm-Up Puzzle for New Solvers ★

by M.S.

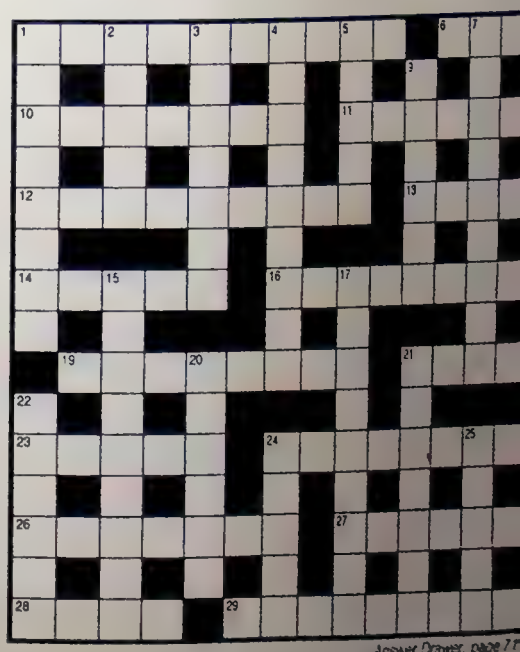
With deta
explanator
Answer Drawer, page

ACROSS

1 Went on horseback in endless cowboy roundup (4) *curtailment*
5 Delicate scrap of cloth in dossier (7) *container*
6 Looking slyly at wrecked liner, e.g. (7) *anagram*
7 Lose hair in a hovel (4) *second definition*

DOWN

1 Umpire sick? Put in a replacement (6) *charade*
2 Baby's attire will be returned to lender when it turns up (6) *reversal*
3 Scandinavian language is spoken in the end (6) *homophone*
4 In summer, GE dealers joined forces (6) *hidden word*



Answer Drawer, page 71

Double Cross ★★

by Michael Ashley

Answer the clues for words to be entered on the numbered dashes. Then transfer the letters on the dashes to the correspondingly numbered squares in the puzzle grid to spell a quotation reading from left to right. Black squares separate words in the quotation. Work back and forth between grid and word list to complete the puzzle. When you are done, the initial letters of the words in the word list will spell the author's name and the source of the quotation. *Answer Drawer, page 66*

1B		2H	3P	4M	5N	6J	7L		8W	9X		10E	11K	12G	13X	14T	15O	16A		17E	18H	19V		20I
21J	22O	23R	24F		25U	26P	27J	28D		29X	30A	31J	32P	33N		34R	35F		36S	37O	38L	39W	40K	41T
42B	43N	44F	45H	46E	47M	48A		49K	50P	51Q		52J	53I	54D	55W	56N		57T	58Q	59A	60J		61H	62T
63N	64W	65P	66E	67S	68U	69J	70R		71W	72G	73A		74D	75E		76V	77B	78O	79P	80S	81I	82R		83K
84D	85R		86U	87S	88A	89E	90G		91M	92B	93R	94D		95L	96A	97U	98E	99O	100K	101S	102F	103T	104C	
105L		106H	107W	108B	109O		110J	111U	112G		113U	114C	115L		116A	117M	118U		119A	120T	121S		122E	123T
	124B		125T	126M	127C	128X		129U	130A	131N	132L		133V	134S	135N		136W	137Q	138M		139I	140G	141L	
142R	143N		144Q	145X	146L	147K		148T	149E	150B	151F	152P	153V	154W	155S	156D	157L	158G	159Q		160G	161M	162X	163J
164O		165O	166W	167K		168F	169B	170S	171X	172U	173W	174J	175D	176B	177O	178N	179M		180R	181U	182X	183G		184P
185G	186C		187L	188F	189R	190U	191O	192N	193B	194X	195T	196E		197V	198A									

A. Dutch footwear (2 wds.) — 119 59 116 73 198 96 16 130 30 88 48

B. Something new and different — 1 42 77 92 108 124 150 193 169 176

C. Anita ___, author of *Gentlemen Prefer Blondes* — 186 127 114 104

D. Lowered in rank — 28 54 74 84 156 175 94

E. Small apartment — 196 10 17 89 66 122 98 149 46 75

F. Piglike South American animal — 188 151 168 102 44 24 35

G. Reciprocal influence — 12 72 112 140 90 160 185 158 183

H. Spiral shell often used as a horn — 2 18 45 61 106

I. Classic 1954 sf film — 20 53 81 139

J. Fall short of a target — 174 110 60 163 69 6 21 27 31 52

K. Disposed of by lottery — 11 40 49 83 100 147 167

L. Poise under pressure — 7 38 157 187 141 95 146 105 115 132

M. Study of wine culture — 4 47 117 126 138 161 91 179

N. Front part of a boat — 143 5 56 135 192 63 33 43 178 131

O. Slow down, as a car — 15 22 37 78 99 109 164 165 177 191

P. 1943 Rodgers and Hammerstein musical — 50 32 152 184 3 26 79 65

Q. ___ Royce (luxury auto) — 51 58 137 159 144

R. Charlatans — 23 34 189 93 82 180 142 85 70

S. Religious hermit — 36 170 155 87 121 134 80 67 101

T. 10 P.M.–6 A.M. work detail (2 wds.) — 14 41 57 62 103 123 120 148 125 195

U. Informal meeting (hyph.) — 25 68 86 97 111 113 118 129 181 172 190

V. King's domain — 19 76 133 153 197

W. Greenish-blue gemstone — 107 173 39 136 8 71 64 55 166 154

X. Waters off China (2 wds.) — 9 13 29 128 145 162 171 182 194

500 Rummy ★★★

by Jules Roth

A Cards-and-Words Puzzle

Can you score 500 or more points in Word Rummy hands from the card spread at right?

♠ How To Play

Find as many common seven-letter words as you can whose cards form Word Rummy hands. A Word Rummy hand is a seven-letter word whose cards make up one *set* (three or four cards of a kind, like 7 7 7 or K K K K) and one *sequence* (three or four cards of the same suit in numerical order, like ♠A 2 3 or ♠9 10 J Q). Either the *set* or the *sequence* may come first. The letters of a *set* may be used in any order; the letters of a *sequence* must be used in the left-to-right order given in the grid. The same card cannot be used twice in one hand. Sets and sequences may be used over and over in different words to form other words. Proper names and foreign words are not allowed, but plurals are fine.

♥ Scoring

Each card in a Word Rummy hand scores its face value. A six scores 6 points, for example. Aces are low and count 1 point each. Jacks, queens, and kings count 10 points each.

♦ Example

In the puzzle at right the word FORLORN forms a Word Rummy hand. The ♢4 5 6 are a sequence with the letters F-O-R; the ♢3 ♡3 ♣3 ♠3 are a set with the letters L-O-R-N. The cards used have values 4 5 6 3 3 3 3, for a total of 27 points.

♣ Ratings

Knock: 350 points (good game)
Gin: 500 points (winning game)
Gin-off: 846 points (our best score)

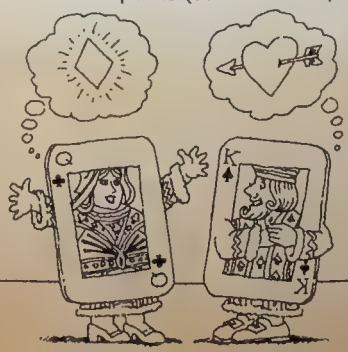


ILLUSTRATION BY RICHARD ROSENBLUM

	A	2	3	4	5	6	7	8	9	10	J	Q	K	
♠	N	H	N	G	E	S	I	R	T	I	G	O	L	♠
♥	Y	G	O	D	E	A	M	E	L	E	T	L	Y	♥
♦	O	S	L	F	O	R	P	E	A	R	B	P	T	♦
♣	M	A	R	A	N	T	I	V	I	D	E	S	H	♣
	A	2	3	4	5	6	7	8	9	10	J	Q	K	

CARDS & WORDS							POINTS
F	O	R	L	O	R	N	27
4	5	6	3	3	3	3	
COLUMN 1 TOTAL							

CARDS & WORDS							POINTS
COLUMN 2 TOTAL							
COLUMN 1 TOTAL							
TOTAL SCORE							

Answers next issue

Quiet, Please! ★★★

A Crossfact Puzzle

One of the things we like most about crosswords is their openness to new twists. The "puzzle within a puzzle" here is from the new book *Crossfact Puzzles*, conceived and edited by Len Fellows and GAMES contributing editor Henry Hook (Simon and Schuster, spiralbound, $6.95). The goal is to discover the missing letters of a surprising fact at the bottom of the next page. To solve, first complete the crossword grid in the usual way using the clues below. Certain answer letters will fall in shaded squares containing printed letters in the upper right corner. When the grid is completed, transfer the letters in the shaded squares to the matching boxes at the bottom of the page—letters that fall in "A" squares should be transferred to the "A" boxes, letters in "B" squares to the "B" boxes, etc. When the boxes are filled, unscramble the letters in each group to spell a word, and read the words thus formed in order—from A to K—to discover a fascinating fact related to the puzzle theme.

Answer Drawer, page 70

BETTMANN ARCHIVE

ACROSS

1 Hepburn stage vehicle of 1969
5 Send back
11 Is niggardly
17 "You are here" marker
18 Iago's wife
19 Femme fatale quality
20 Carson's leap?
22 Tower warders
23 Jeanne d'Arc: Abbr.
24 Posed
25 Acquiesce
27 Concorde: Abbr.
28 Pavarotti, e.g.: Abbr.
30 Features of 81-Down
34 Cereal spike
35 "___ girl!"
36 Favor from Lady Luck?
38 *Peter Pan* set, Act 1
40 Princely abbr.
41 Miniquake
43 Busy ones
44 "... bushel and ___"
47 Manhattan Project scientist and family
49 Hansom for Holmes
52 Indian prime minister
53 Daily grind
56 Fifth wheels?
59 Nanette's reprimand
60 Berlin exclamation
61 Quick-fried cornbread
64 Fuss
65 Gossip-column tidbit
67 Swap-meet transaction
68 Make happy
70 Beret's cousin
72 Pigs' digs
73 Maestro's concern
74 Bridge support
75 Noun suffixes
78 Stage parts
82 "___ about time!"
83 Crowned hats
86 Aquatic opossum
87 Curds' partner
89 Law's limb
90 Silent star
92 Prefix with pro or final
93 Fixed routine
94 Hang down
96 Pen pal
98 Broad's opp.
99 All you can carry
101 Implicit agreement
106 "Damn with faint ___": Pope
107 NYC restaurateur
108 Fragrant rootstock
109 Kin of an Irish playwright
110 Fountain favorites
111 Tweed or Hogg

DOWN

1 Animal, down south
2 "___ a kiss but in the cup . . ."
3 Runner from Yorkshire
4 Confesses
5 *Sketches in the Sand* author
6 Unclad ruler?: Abbr.
7 "Bei ___ Bist Du Schön"
8 Clay, later
9 Role in *The Sea Gull*
10 Lady Macbeth's "fatal vision"
11 Rock singer Leo
12 *Twittering Machine* painter
13 Labor org.
14 Admonition to secrecy
15 Loan, to Chaucer
16 Actress Berger
17 Hockey statistic
21 *The Price Is Right* décor feature
26 Bob's partner
29 Monkey's cousin
31 Irritates
32 Poet's preposition
33 Compass pt.
35 Western resort
37 Name for a colleen
39 Prisoner's plan
40 Possessed
42 Come up again
45 Transport for Uncas
46 Celebrated
48 Sycophants' words
50 Founder of Dadaism
51 Fashion color
53 *Carousel* star
54 Booth or Gable
55 John Ford movie of 1952
56 Neutered
57 Coin of Afghanistan
58 City on the Alabama
62 Margaret's father's monogram
63 Mawkish
66 Describing many attic treasures
69 "Dumb" people?
71 Curved character
73 Nicholas or Alexander
76 Japanese drama
77 Musical syllable
79 Leadoff acts
80 Donne words
81 Some separates
83 Away
84 Is overdramatic
85 Chef's aids
87 Coats and capes
88 Expedite
89 French site of Roman antiquities
91 Lennon's lady
94 Bernhardt's rival
95 Invertebrate's sensory organ
97 Door part
100 Trivial amount
102 "Silent" man of Penn. Ave.
103 Clock numeral
104 Explosive, for short
105 B'way sign

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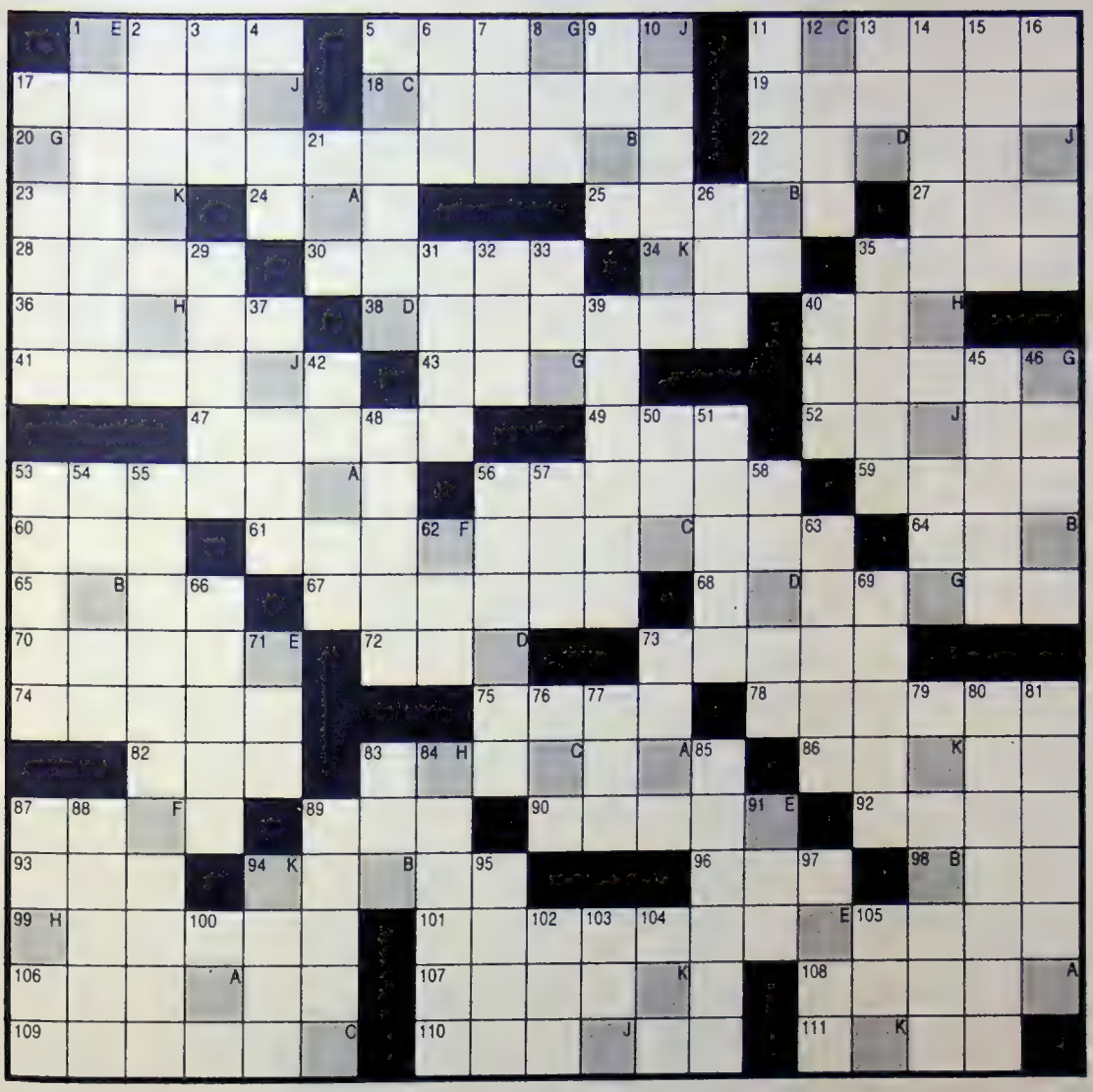
by Nancy Ross



During his complete term as a member of Parliament . . .

A _ _ _ _ _ B _ _ _ _ _ _

C _ _ _ _ _ D _ _ _ _ E _ _ _ _ .

F _ _ G _ _ _ _ _ T O H _ _ _ _

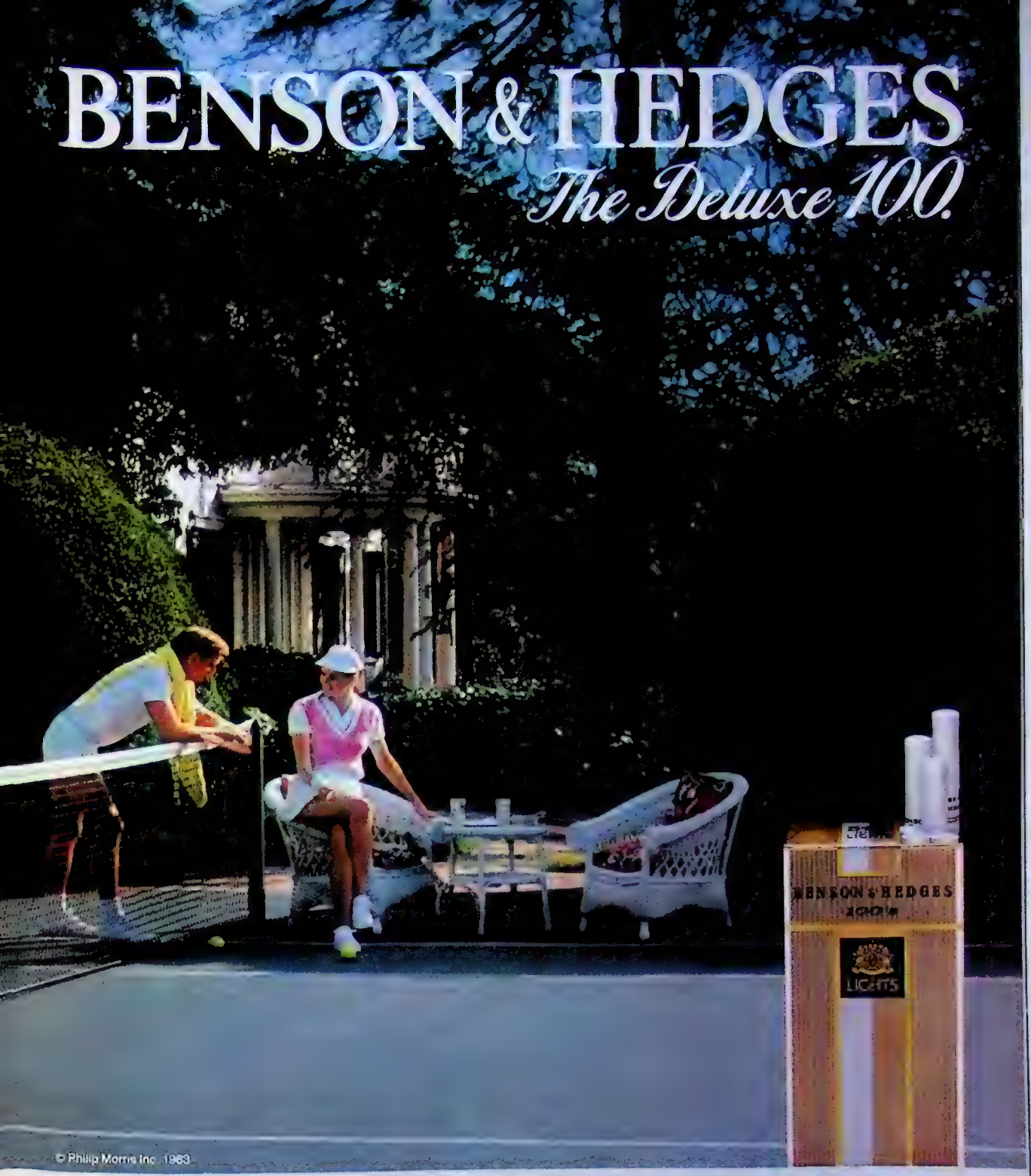
A J _ _ _ _ _ _ K _ _ _ _ _ _ .

Over a Barrel ★★

by Ulrich Koch

Warning: This maze will send you "over the edge." Find a path from the bottom of the barrel (see arrow) to the stairs at the top, proceeding around the back of the cylinder where necessary. Each time you go off the edge, reenter on the opposite side at the same level. (You may go off at any level; the numbers will help you keep track of your position.)

Answer Drawer, page 70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THE LATE SHOW

★☆

by Stephanie Spadaccini

Have you ever sat through the movie *Pat and Mike* just to hear Spencer Tracy say of co-star Katharine Hepburn, "Not much meat on her, but what's there is cherce"?

Have you ever waited in anticipation for Tippi Hedren to sit on that schoolyard bench while the jungle gym behind her slowly and ominously fills up with crows, in Hitchock's *The Birds*?

We have, too.

For 12 film classics that have appeared countless times on the tube, we've assembled three sets of clues. The first clue, in Column A, is a telling detail or memorable plot element; the second (Column B) is a quote from the film; and the third (Column C) is a bit of information about an actor's or actress's role in the film.

If you can guess the name of the movie using only the first clue, award yourself 3 points per film. If you need the first *and* second clues, give yourself 2 points. And if it takes all three clues, award yourself 1 point.

It might help if you fold this page right now, so you won't be tempted to peek.

Answer Drawer, page 71

SCORING

25–36—You passed up the chance to see *Gandhi* because *Singin' in the Rain* was on TV that night.

13–24—You fell asleep during the 2 A.M. showing of *Stagecoach*.

12 or under—You prefer reruns of *Charlie's Angels*.

DON'T PEEK AT THE QUESTIONS UNTIL YOU'VE READ THE RULES!

Column A	Column B	Column C
1. "The Marseillaise" is sung.	"Louis, I think this is the beginning of a beautiful friendship."	Dooley Wilson at the piano.
2. A dress made from green velvet draperies.	"I don't know nothin' about birthin' babies."	Hattie McDaniel force-feeding the corset-clad heroine.
3. A rocking chair and a lightbulb.	"A boy's best friend is his mother."	Vera Miles plays the heroine's sister.
4. Finale atop a skyscraper.	"Oh no: It wasn't the airplanes. It was beauty killed the beast."	Bruce Cabot, the leading lady, and the title character caught in a love triangle.
5. A clock on the wall, ticking relentlessly.	"It's no good. I've got to go back. They're making me run. I've never run from anybody before."	Grace Kelly as a Quaker bride.
6. Leeches!	"Would you hang us together, please?"	Katharine Hepburn plays a missionary.
7. Sun-Up wins the race.	"Get your ice cream! Get your tootsie-fruitsie ice cream!"	Margaret Dumont hires a horse doctor to run a sanitarium.
8. The hero, floating dead in a swimming pool.	"I *am* big. It's the *pictures* that got small."	Gloria Swanson's swan song.
9. An army of winged monkeys.	"Well, my little pretty, I can cause accidents, too."	Frank Morgan plays the title role.
10. A shipboard romance.	"Oh, Jerry, don't let's ask for the moon. We have the stars."	Paul Henreid lights two cigarettes.
11. Macy's vs. Gimbels.	"Your honor, we request an immediate ruling from this court: Is there or is there not a Santa Claus?"	Natalie Wood gets her dream house.
12. The Sarah Siddons Award.	"What a story! Everything but the bloodhounds snappin' at her rear end!"	Marilyn Monroe in a bit part as George Sanders's date at a party.

ILLUSTRATION BY JOE LERTOLA

Who can help your doctor cure periphrasis?

Periphrasis may be a scourge but it is not some dread disease. It is the use of roundabout language instead of something shorter and more direct.

Webster's Ninth New Collegiate Dictionary, just published, can help. This new edition of America's best-selling dictionary has almost 160,000 entries including thousands of new ones, all defined clearly, concisely, and accurately. And at many of those problem words, you'll find authoritative essays on contemporary usage.

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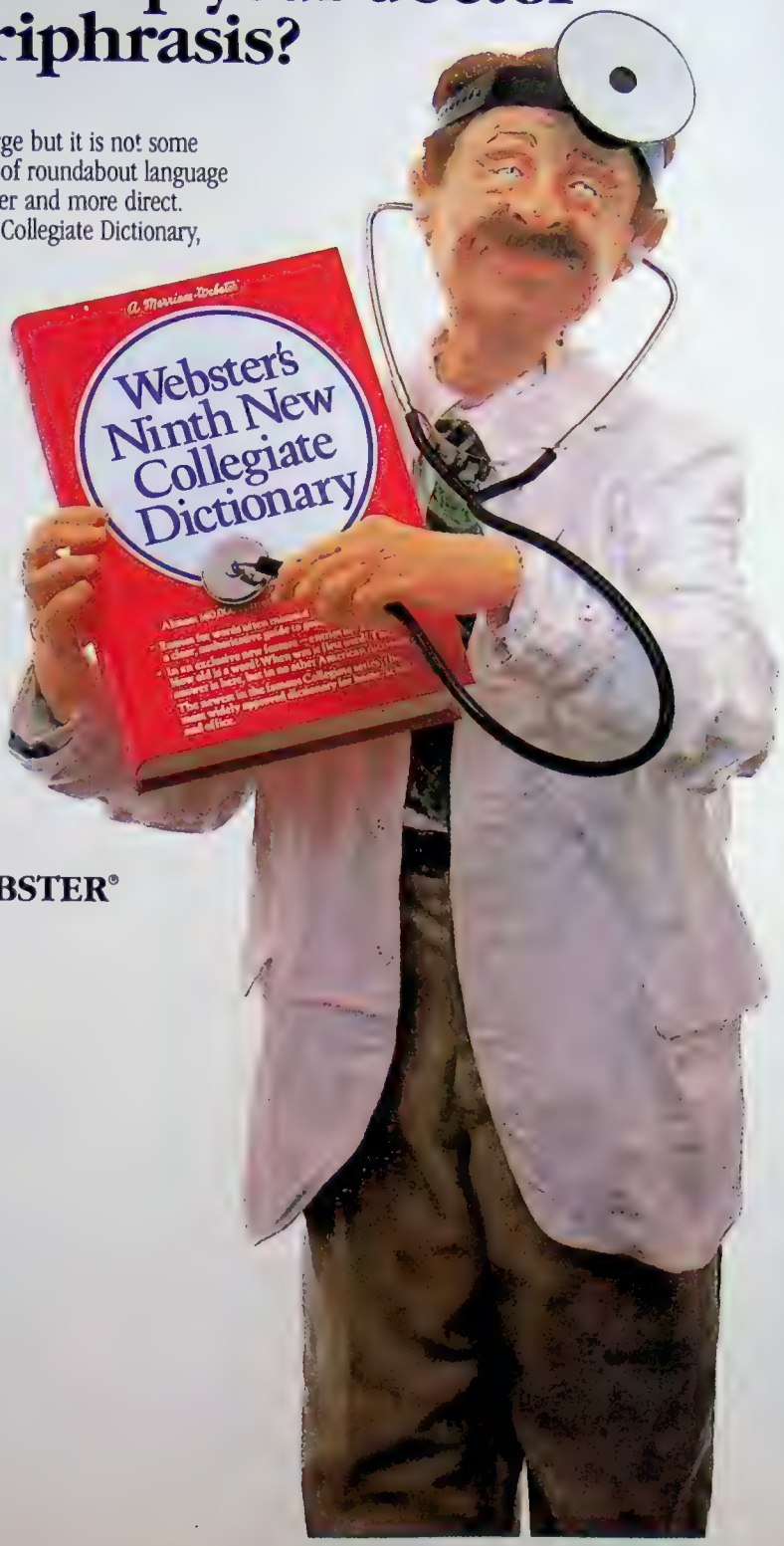

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STAR

A GAME IS BORN

ON A SMALL ISLAND OFF THE COAST OF Maine, Craige Schensted, a quiet, bearded man with long, graying hair and a thoughtful manner, lives a simple life. He and his wife, Irene, own a weathered two-story house that is overfilled with books, games, and boxes of papers. They have no television, no refrigerator, and no running hot water. Instead of cars (Craige abhors motor noise and believes the automobile to be "man's greatest mistake"), they keep two kayaks "parked" at their doorstep. In this unlikely setting, Craige has created what may be the ultimate in the "connection" family of strategy board games. He calls it Star, and it is presented on the next two pages.

Many new games are billed as being "as easy to learn as tic-tac-toe" but "as challenging to master as chess." Star is the rare game that lives up to this description. When played on a small board, a game of Star can end about as quickly as one of tic-tac-toe, but Star has the added advantage that draws are impossible. When played on a large board, Star has a strategic depth—a term used in game contexts to refer to the number of measurably different skill levels players may achieve—that rivals that of chess or even go. Star is also well suited to handicapping, allowing unequal opponents to play interesting games. To paraphrase a popular saying about chess, the game is a sea in which a gnat may drink and an elephant may bathe.

PHOTOGRAPH BY KAREN A. RAYNES

How is a great game invented? Many classic games, like chess and go, are so old and were developed over so long a time that little is known of their origins. The idea for Star, which may one day be viewed as just such a classic, came to Craige Schensted as a sudden inspiration—but only after he had spent some 30 years experimenting with other connection games.

Craige was born in 1927 and grew up in Minnesota. Even as a child, he says, he tended to look at things from an uncommon viewpoint, to immerse himself in details, and to be acutely aware of spatial relations—traits that would prove useful to him as a game inventor. After graduating from the University of Minnesota, he worked there for three years, then at the University of Michigan for 17 more, in the field of applied mathematics, doing research in such esoteric areas as radio astronomy, isotope separation, and electromagnetic scattering. It was at Minnesota that he met Irene, a Ph.D. in physics. While his professional life was devoted to science, his private fascination with games deepened, especially after he became friends with Charles Titus, a mathematics professor with an equally strong love of games. The two soon began to collaborate. Their first project was to develop a multiplayer version of Hex, a well-known connection game in which players attempt to bridge opposite sides of a rhombic array of hexagons. The result was Cram, a highly original but still unpublished board game in which players score points by connecting paths printed on hexagonal tiles. Their later game PsychePaths enjoyed moderate success in the 1960s, and with minor changes recently became available again under the name Kaliko (reviewed in GAMES, May 1983).

In the meantime, Schensted and Titus continued to tinker with Hex. Their esthetic sensibilities were especially troubled by the relative unimportance of the corner spaces. Surely the game would be better, they reasoned, if all the spaces were of roughly equal importance, since that would make the strategies less rigidly fixed. In 1953 Titus had come up with the game of Y—also known as Mudcrack Y because the jagged lines separating the board's spaces looked like cracked mud—in which players try to connect all three sides of a triangular array of hexagons. That game had much

(*Continued on page 54*)

S_T_A_R STRATEGY

by Craige Schensted

The rules of Star are brief, and appear under the board on the facing page. The following example of a completed game on a small board will serve to illustrate the method of scoring (reading the rules first will be helpful).

In the figure, moves are represented by shaded regions. Red has one star touching eight edge regions; this star is therefore worth 8 minus 2, or 6 points. Black has stars touching three and eight regions; these are worth 1 and 6 points, respectively, for a winning total of 7 points. (The isolated black area at the bottom touches only two regions and thus has no scoring value.)

Remarkably, regardless of the size of the board, the total number of points obtained by the two players is always two less than the number of edge regions to be connected. Because of this, Star has the important feature that draws are impossible.

The larger board on the facing page has 75 cells and 33 edge regions, making 16 points the minimum winning point total (since the players' combined scores will be 31).

Handicapping

A game between evenly matched players is usually played by the "pie rule" (I cut the pie, you choose what piece you want). That is, one player decides where the first move is to be, the other player decides who will play first (with that move). If one player is a bit weaker, he goes first and moves wherever he wishes. If he is *much* weaker, he goes first and plays more than one piece on his first turn.

SAMPLE GAME AND STRATEGY HINTS

The game shown below was played with the pie rule. The first move was thus intended to be noncommittal rather than the strongest possible play. Moves 2-6 are in the corners, which are considered the strongest plays

Avoiding overconcentration On move 7, Black felt that occupying the corner adjacent to his first move would duplicate part of the job being done by 1, so he played along an edge instead.

Connecting stars Connecting two stars increases your score by 2 points, since you then subtract 2 from only one star instead of two at the end of the game. If your opponent prevents your connection by connecting *his* stars, then he gets the 2 points. Black 11 prevents Red from connecting his 8 and 10, but since it does not increase Black's "influence" (see *Influence vs. immediate score*, next column), it may be premature. Red prevents Black from scoring 2 points at 12, while also increasing Red's score by 1 point. Black 13, threatening to connect with 1, blocks Red's further expansion and induces 14, thus gaining Black time to build a connection to 5.

The two-way stretch If Black can keep Red from invading the area between 9 and 15, it will be worth 6 points to Black. Red decides to invade immediately. Red 16 is connected to the edge with a *two-way stretch*. That is, if Black tries to cut him off from the edge by playing in either cell marked A, then Red can connect by playing in the other.

Influence vs. immediate score Instead of taking points immediately by playing along the edge, Black aims with 17, 19, and 21 to get a dominating influence over the lower part of the board. Influence may be thought of as future potential; the more pieces a player has surrounding an area, even if they are not securely connected to one another, the harder it will be for the opponent to form large stars in that area. Red 24 is a big play, but a Black play there would not have gained any influence. Red 26, however, is crucial for both immediate score and influence; probably Black should have played 26 instead of 25, to prevent Red from connecting 22 to 10.

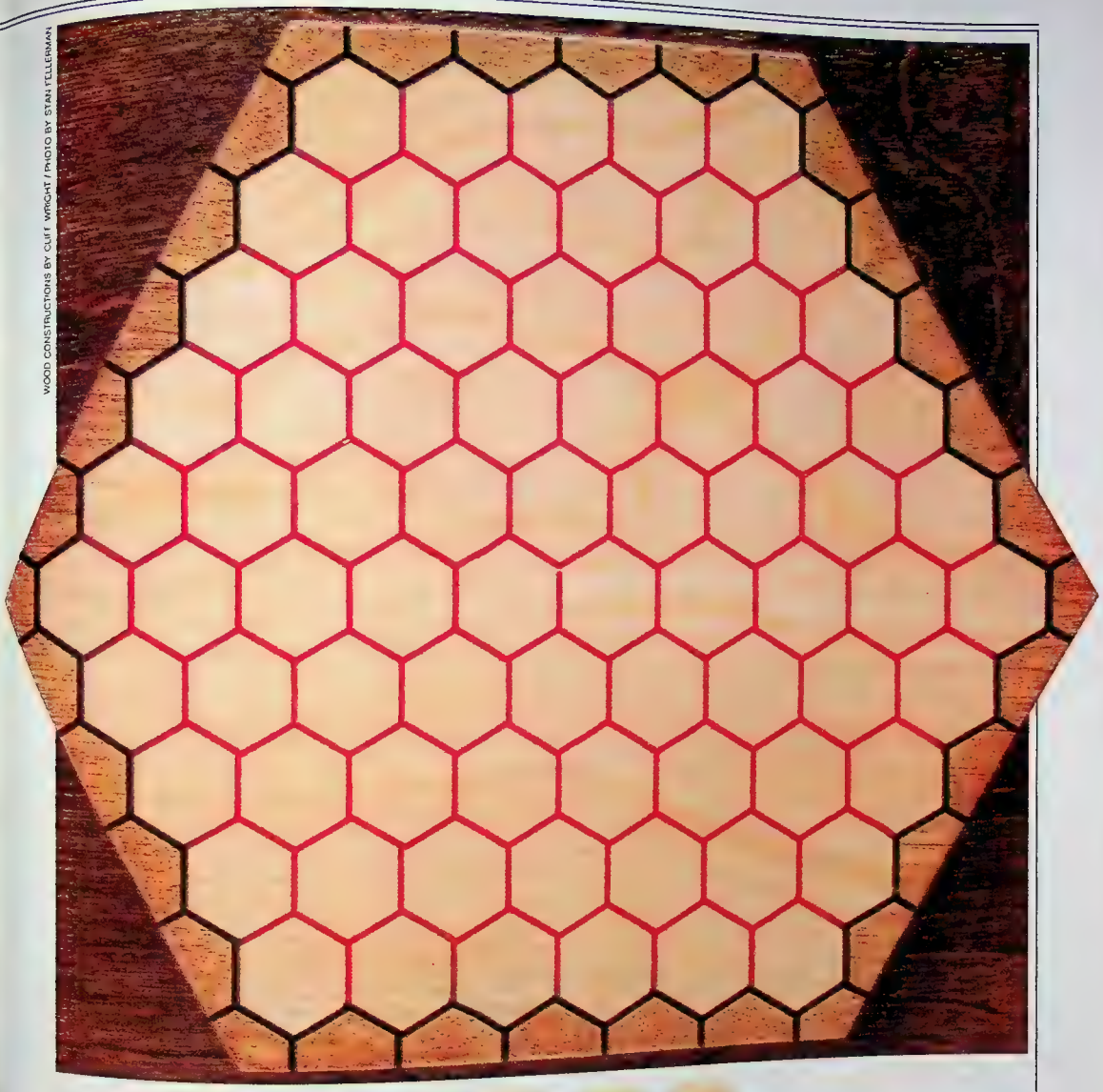
Pairing strategy Black 31 threatens to get 2 points with a play at B (connected to 31 by the two-way stretch C-D) followed by a play at either E or 32. This is a simple example of a pairing strategy, in which cells C and D are paired and cells E and 32 are paired, and a player can be certain of being able to play on at least one cell in each pair.

Waste not, want not Red 32 protects against Black's threat, but is a clear mistake. It should be at D, which does the same job but in addition increases Red's influence toward the bottom of the board.

The final struggle The game reaches its climax. Taking into account the two-way stretches A-A, G-G, F-F, and B-E, Red has a big star worth 12 points. In addition he has 2 more points in corners 2 and 4. Black has to hope that his influence is strong enough to limit Red to at most 1 more point.

After Red 34, each of the cells 35, 36, and 37 is worth 1 point. Black must play in one of them to be sure of occupying two. Red 36 then forces Black 37. Red 40 protects the connection from 36 to 38, but is a "waste not, want not" type of error; the play should have been at H, which would have facilitated this group's connection to the right board edge. (If after Red H, Black were to play J, then Red K would bring about the double threat of connecting to 4 and 38.) Black 41 attacks Red's attempted connection from 38 to his large star. But in spite of Red's slight slip at 40, Red 42 wins as explained below.

Being relevant Red threatens L, which gets 2 more points with the two-way stretch M-N. Red also threatens P, which gets 2 more points with a play at either Q or R (R would connect P to 42, using the two-way stretch S-T). Since Black does not have any play that is relevant to both threats, he concedes the game to Red.



WOOD CONSTRUCTIONS BY CLIFF WRIGHT / PHOTO BY STAN FELLERMAN

STAR

RULES

Equipment Two contrasting sets of approximately 30 pieces each, and the board shown.

Play Each player in turn places a piece on any vacant light brown space. Once placed, a piece is never moved or captured. Play continues in this manner until both players choose to pass (which will happen when further moves cannot influence the outcome).

Scoring A player receives points for each of his connected groups of pieces that touch at least three of the 33 dark regions (the incomplete hexagons) around the edge of the board. Such groups are known as "stars," owing to their tendency to develop numerous branches. A single piece on one of the six corner spaces touches three dark edge regions, and also counts as a star.

Each star is worth 2 points less than the number of dark regions it touches. The player with the most points wins. (For an example of calculating the score of a game, as well as rules for handicapping, see the first column on the facing page.)

(Continued from page 51)

the same drawback as Hex until Craige, in 1969, found that slightly distorting the board regions greatly enhanced the importance of the corners. But Irene's insistence that Y was still not as good as go spurred Craige to invent Poly Y in 1970. In contrast to the simpler three-sided Y boards, Poly Y could be played on boards of five, seven, or any odd number of sides. This game was the true forerunner of Star.

Craige and Irene began a Y club in Ann Arbor, and ran tournaments in both Y and Poly Y. They produced a limited number of sets, but the games remained little known, even after publication of Craige's book *Mudcrack Y and Poly Y* (reviewed in GAMES, September/October 1980), which provided strategy hints, annotated games, and many boards on which to play the games with colored pencils.

Ten years ago, looking for a peaceful, more natural environment, the Schensteds left academic life and moved to their current home on Peaks Island, Maine, a short ferry ride from downtown Portland. Irene continued to teach intermittently, but spent most of her time writing. Craige, meanwhile, kept busy with such projects as the development of a "median algebra"—an elegantly simple kind of mathematics with applications in symbolic logic and computer design. Recently he has been experimenting with fiber art (crochet, for example) and lexic images (using letters and words in unusual ways, such as to form part of the pictorial representation of an object).

For some years after moving to the island, Craige continued to refine Poly Y by experimenting with different board designs. He and Irene would sit on the rocks overlooking Casco Bay and try to gain deeper insight into the game's strategies. Suddenly, about two years ago, inspiration struck. What if, in addition to linking certain sets of board edges with chains of pieces (the object in Poly Y), players also had to connect up as many of their chains as possible? "The idea for Star was so simple," Craige later remarked, "I don't know why I didn't think of it before." Though superficially a small change, its effect on play, as well as on board design, proved to be profound, and convinced Craige that Star has greater depth than any other connection game—greater, indeed, than most other games, period.

Craige has no immediate plans to market Star—the name, by the way, comes from the star-shaped configurations created in play—but he probably will do so eventually. Its appearance here is its first publication in any form. If enough players express interest, he and Irene may organize a weekend Star tournament on Peaks Island. If after playing Star you think you'd like to participate, send us your name and address and we'll keep you informed of developments.

—R.W.S.

STAR

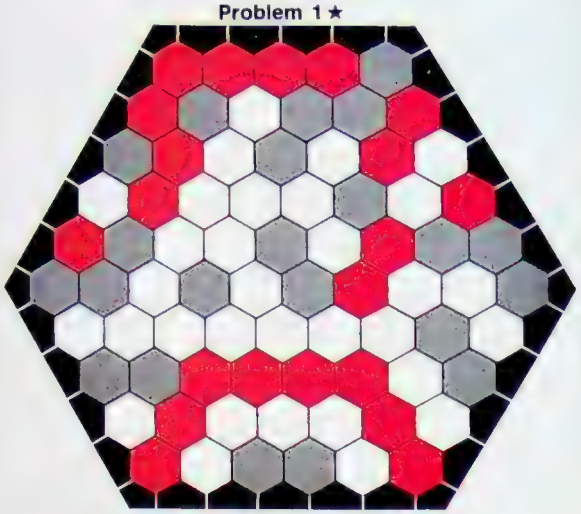
PROBLEMS

by Craige Schensted

In each of the diagrams below, Red is to find his winning move.

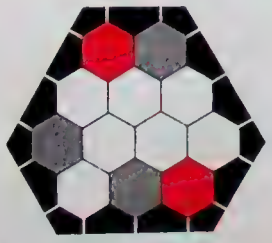
(See pages 52-53 for Rules and Strategy)

Problem 1 ★

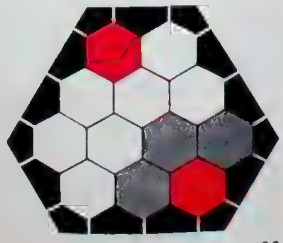


Problem 2 ★★

Problem 3 ★★★



Problem 4 ★★★



Answer Drawer, page 66

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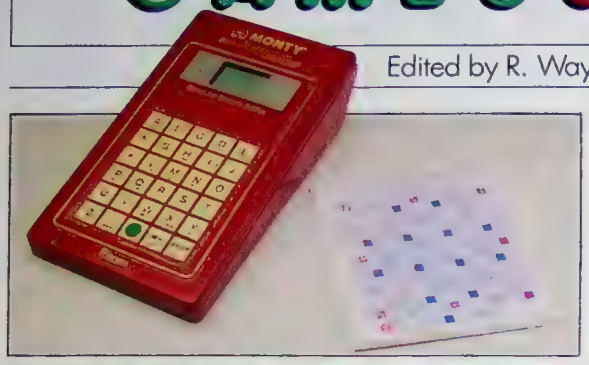
GAMES & BOOKS

Edited by R. Wayne Schmittberger



Monty Plays Scrabble Brand Crossword Game

(Ritam, around $150; two memory expanders, around $30 each; also available on disk for Apple II with 48K, around $40, and for TRS-80 Model III, around $35)

Computers have long been available as opponents in chess, bridge, and a few other traditional games. Now there's one that plays Scrabble, and it plays very well indeed.

Playing against as many as three human opponents at a time, Monty deals the tiles, keeps score, and usually makes his moves in 30 to 90 seconds, depending on which of four skill levels he's set on. With an understanding of basic strategies, plus a built-in memory of 12,000 words that can be expanded to 44,000 with the purchase of two memory expanders, Monty consistently scores a lot of points.

Since the game's LED display shows only a 4 x 8 section of the board at a time, players will find it necessary to keep a record of the overall position on one of the scoresheets provided. To position a word, players type it in, then scroll the board display in any of four directions.

Monty's only significant weakness is his failure to challenge phony words, particularly ones with common prefixes and suffixes. Thus we successfully tried LAMOONY, setting up a nice triple-triple of ROLZURAL ("You're a genius," Monty commented at this point). It's fun to avenge a loss this way, but you should play "honestly" for a proper challenge.

The 48K disk versions for home computers play similarly, except that they display the entire board at once and have a fixed vocabulary of 39,000 words. —R.W.S.

Upwords

(Milton Bradley, around $10)

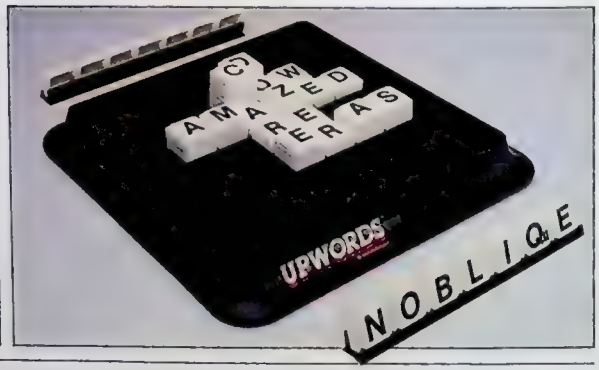
This elegant three-dimensional word game demands both strategic and imaginative play. Words are played in crossword fashion, with the twist that letters can be placed on top of previously placed words.

The 8 x 8 board is unmarked, and the letter tiles are not assigned point values. Instead, one point is scored for every tile in a word, plus one point for every letter stacked under the word. Points are doubled, however, for any word played entirely on the "ground level." This rule, like another that limits the height of any stack to five letters, encourages players to spread words out early in the game.

After the initial few moves, it takes a lot of thought to grasp all the possibilities, since you may cover up every letter in a word but one (as long as all contiguous letters still form words in all directions).

There's a hard-to-achieve bonus for using all seven tiles in your rack in one turn. At the end of the game, there's a heavy penalty for every unused tile. Thus the peskiest letters to use, like J, X, and Z, are best played as soon as possible.

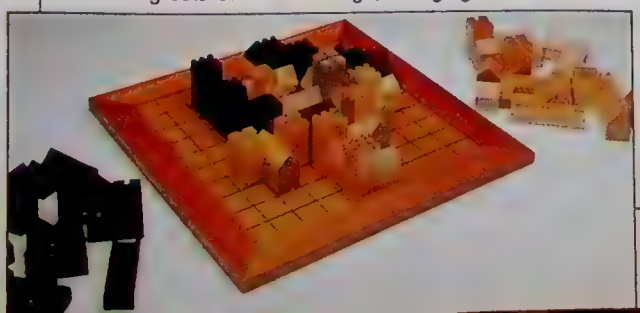
Upwords may not satisfy word-game buffs whose specialty is making long words. But puzzlers who like the challenge of weaving words into a tight space will find this game hard to top. —L.P.



Cathedral

(Cathedral Games, available from N. Z. Imports, Box 5019, Irvine, CA 92716; $47.50 postpaid

Handsomely crafted from New Zealand timber, Cathedral appeals to the eye as much as to the intellect. Two players have contrasting sets of 14 "buildings," ranging in size from the tiny Tavern, which fills one board square, to the oddly shaped Academy, which fills five squares. One neutral piece, the six-square Cathedral, is placed at the start of play.



The game has elements of both go and pentominoes, but is distinct from both. Each player in turn places one of his pieces on the board. If your pieces, alone or in conjunction with the edge of the board, surround an area that contains at most one enemy piece, the area becomes "dedicated" to you, and only you may play there in the future. The winner is the player who can fit all his pieces onto the board; if this is impossible, the winner is the player whose unused pieces occupy the smallest area.

As the board fills up, it takes on the appearance of a crowded village, with pleasing and varied patterns. Overall, Cathedral is an exceptional game for both its visual beauty and intriguing gameplay. —R.W.S.

PHOTOGRAPHS BY STAN FELLERMAN

Stock Market Specialist (John N. Hansen Co., around $20)

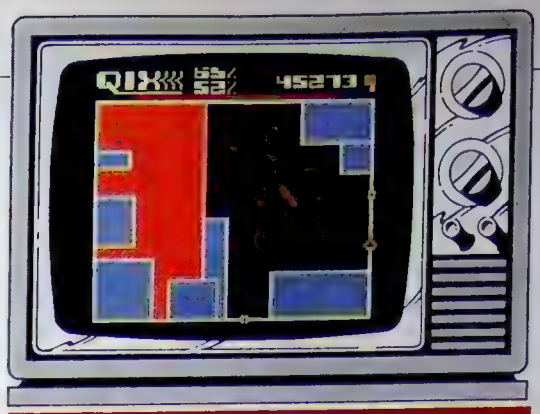
Stock Market Specialist takes you through a day on the floor of the American Stock Exchange. It was invented by Marcia Kramer, a Ph.D. in economics who is the Exchange's director of marketing, research, and planning.

Each of the players (two to four, but four is best) acts as a specialist in charge of one of the game's four stocks. Starting with a fixed sum of money, each player sets up a secret portfolio of shares in the offerings and enters his holdings, including cash reserves and borrowed funds, in a ledger that must be maintained throughout the game. Each player also keeps an order book, which records unexecuted orders (placed by the players, or resulting from landing on various spaces). Meanwhile, stock prices fluctuate as players draw "smart money," "newsflash," and "rumor" cards.

A player must continually "make a market" in his stock, which means quoting a "bid" at which he will purchase shares, a higher "offer" at which he will sell, and the number of shares available at each price. Certain orders must be executed in full, even if it means you must sell "short" (i.e., sell shares you don't yet own). The Exchange's trading rules limit players' options in their own specialty stocks, but players are free to speculate at will in the others.

When players reach the end of the track, the market closes. Players then collect or pay appropriate interest, dividends, and commissions. The wealthiest player wins.

This is not an easy game to learn. You will have to go through the rules a few times before you play, and you'll have to play a number of times before you begin to understand the game's subtle strategies. But, especially after mastering the advanced version, you will have a much clearer conception of what makes the stock market tick. —S.S.



Qix (Atari, for the Atari 5200, around $45)

In this faithful adaptation of the arcade hit, you'll find no cute cartoon characters, no enemies to zap, no hyperspace to warp into. What you *will* find, in a totally abstract setting, is a range of strategies as broad as those of any video game.

Your joystick moves a cursor that draws horizontal and vertical lines on the screen. Moving randomly about the screen is a protean bundle of lines—the "qix." When you venture from the edge of the screen—as you must, to elude the deadly, pursuing "sparx"—the qix will eliminate one of your five lives if it touches any part of a line you are drawing. But if you complete a line between any two points on the screen's edge, thus dividing the screen into two areas, the area not containing the qix is immediately colored in, reducing the amount of space in which the qix can maneuver.

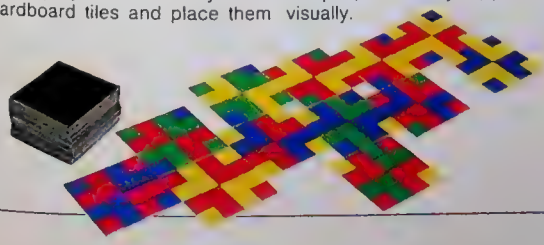
When you fill in at least 65 percent of the screen (more in the advanced levels), a new board begins. Points are earned for the area filled (they double if you used the risky "slow draw" mode), and a huge bonus is awarded for each percent of screen area filled in above the 65 percent "threshold." So it's important that the last line you draw bring your total enclosed area as close to 100 percent as possible.

From the third board on, you are faced with two qixes. If you separate them with a line, you get a new screen on which all points are doubled. If you separate them again, the next board's points are tripled, and so on. Sooner or later, though, you'll have to cash in on your bonuses by filling in enough of the screen to pass the threshold, or all your qix-splitting will have been for naught.

The rule booklet provides an unprecedented (for a video game) number of strategy tips, such as drawing a lot of little canyons in the hopes of trapping the qix in one. This may be the only video game, though, in which players can experiment with new strategies forever. —R.W.S.

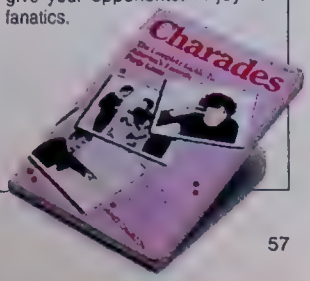
ETCETERA

Continuo (Samuel Ward, around $5) just won Game of the Year honors in England. Two or more players alternately draw cardboard tiles and place them so they extend as many different colored paths as possible in the previous array. It's almost too simple, but very appealing visually.



Impossi-Ball (Milton Bradley, around $9), the newest entry in the old cube game, offers 20 triangular wedges that are rotated five at a time, altering 12 colored circles into more than 8 octillion different patterns. We're still afraid to turn it more than once.

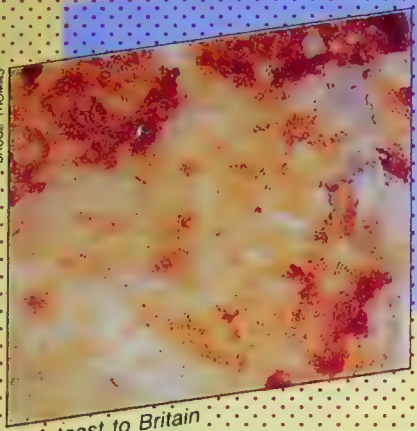
Charades, by James Charlton (Harper & Row, 151 pages, $6.95 paperback), reveals more information about America's favorite party game than you probably thought existed. Here are official signals for ad slogans, record albums, even recipes, with devious examples you can give your opponents. A joy for fanatics.



EYEBALL BENDERS ★☆

WHAT ARE THESE OBJECTS?

Answer Drawer, page 68



BRUCE THOMAS

1. A toast to Britain

BILLY JIN

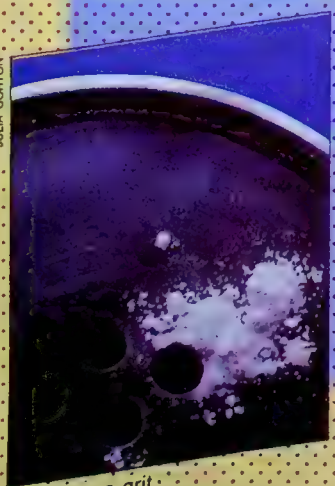
2. For changing times

JACK ABRAHAM

3. Wearwithall

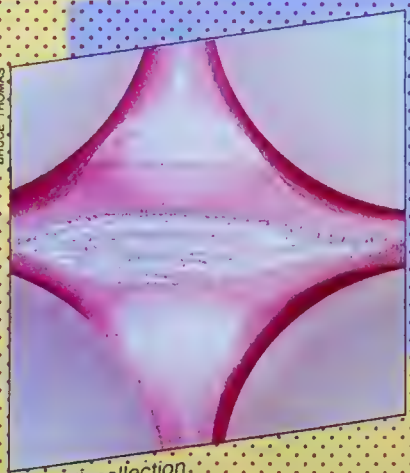
JACK ABRAHAM

4. Stir crazy



JULIA GORTON

5. For true grit



BRUCE THOMAS

6. Shell collection

GEOFFREY GOVE

7. Drop stopper

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CONTEST RESULTS

ILLUSTRATION BY RICK TULKA

DO YOU CLERIHEW?

From May

More than 1,400 readers fell
Under the spell
Of the clerihew.
Whew!

Those of you who caught clerihew fever sent in anywhere from 1 to 30 entries apiece on such diverse celebrities as Richard Nixon (who did some fixin'), Ronald Reagan (who either is or is not a pagan, depending on one's political persuasion), and Tom Selleck (who, as we know, is not a relic). The task was to write a humorous four-line poem about a famous person, the first line rhyming with the second, and the third with the fourth. Such doggerel verses are called clerihews, after their inventor, Edmund Clerihew Bentley.

Entrants found worthy subjects everywhere. Among those who turned up with some frequency were James Watt, Princess Di, Dolly Parton, and Koo Stark. Some readers found inspiration right at their fingertips—they turned to the GAMES masthead and clerihewed the staff (providing the judges with a few good yocks).

The grand prize winner is Steve Fogland, of North Platte, Nebraska, who wins his clerihew rendered in calligraphy on parchment for this philosophical query:

Did Descartes
Depart
With the thought
"Therefore I'm not"?

And GAMES T-shirts go to eight runners-up, whose clerihews are printed at right.

—S.A.S.

The Hindus thought
Mohandas K. Gandhi
Was dandy.
But he made the British
Skittish.
—Charles F. Bailey, Atlanta, GA

Gypsy Rose Lee,
An ecdysiast, she
Often headed the list of best
Undressed.
—Miles Klein, East Brunswick, NJ

B. F. Skinner
Found a way—a sure-fire winner—
To condition a rodent, and that
Is like pulling a habit out of a rat.
—Bob Lodge, Seattle, WA

Is there hope
That the Pope
Will elope?
Nope.
—John Goldie, Steamboat Springs, CO

Jack,
Crack!
Jill,
Spill!
—Gary Crew, Tallahassee, FL

Labor leader James Hoffa
Apparently refused an unrefusable offer.
It is widely feared
That he just
—Alex Dunne, Sayre, PA

Billy the Kid
Never did
Apologize
For killing all those guys.
—Paul Erland, Nashville, TN

Mrs. Steve Lawrence
Has an abhorrence
For junk food—you might say
She's a gourmet.
—Phil Garland, Tacoma, WA

KIBITZERS' REVENGE

From May

The challenge was to find the best score in a Scrabble Brand Crossword Game, starting with only the words RIGHT and ANGLE crossing in the center of the board. Your rack could be filled four times by drawing from the ends of an extended row of tiles that we provided.

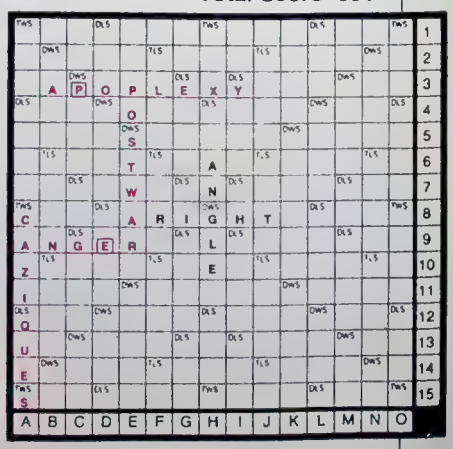
From the 2,600 entries we received, only one had the top score of 581 points. It was submitted by Daniel L. Pratt of Laurel, Maryland, who will receive as his grand prize Monty, the computer Scrabble® opponent with two advanced vocabulary modules. The key to Pratt's winning board was the second-rack play of ANGER; although scoring only 7 points, it opened the triple-word spaces for the bingo play CAZIQUES, scoring a colossal 392 points. The complete winning entry is shown with the board below.

Five entries tied for the runner-up prizes of GAMES T-shirts, each with a score of 560 points from the plays TORQUATE, PLAYWRIGHTS, SNEEZING, and EXOTICA/TANGLE. They came from: Fred Brown, Moorestown, NJ; John Jarowski, Silver Springs, MD; Nancy Murphy, Iowa City, IA; Richard Silberg, Baltimore, MD; and Stephanie Thompson, Wayland, MI.

—M.S.

THE WINNING ENTRY

	Rack	Word(s) Formed	Points
1.	A T O R P W S	POSTWAR, ARIGHT	84
2.	U Q □ G A N I	ANGER	7
3.	U Q I S Z E C	CAZIQUES	392
4.	X A O □ E Y L	APOPLEXY	98
		Total Score	**581**



Gameboard notational system diagram © 1973 Selchow & Righter Company. Reprinted with permission.

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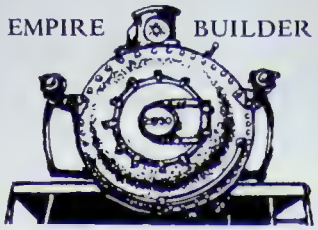

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Edited by Stephanie Spadaccini

WORDPLAY

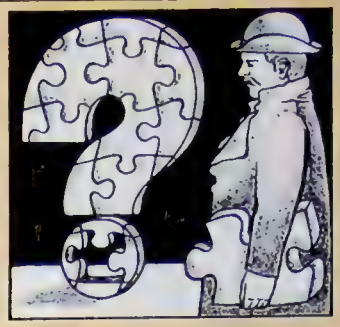
Self-Reference

Fill in the blanks in this sentence with the appropriate numbers (spelled out—not in figures).

IN THIS STATEMENT THE NUMBER OF OCCURRENCES OF E IS _____, OF I IS _____, OF N IS _____, AND OF T IS _____.

—Guney Mentes

Answer Drawer, page 68



TEASERS

What's in a Name?

How is the number 1,009 related to the last name of an old-time cowboy, the number 54 to the first name of a well-known actress, and 501 to the nickname of a member of English royalty?

—Raymond D. Love

Answer Drawer, page 68

TRIVIA

Liz: A Quiz

Elizabeth Taylor has made 10 films with Richard Burton (at last count). Can you name at least five of them?

Answer Drawer, page 68

—from *505 Movie Questions Your Friends Can't Answer* (Walker and Company). © 1983 by Louis Phillips

NUMBER PLAY

After-Math

Can you complete the following series?

a. 1/2, 2, 4 1/2, 8, 12 1/2, ___
b. 4, 2, 1 1/3, 1, 4/5, ___
c. 5 1/5, 4 1/4, 3 1/3, 2 1/2, ___

—S.A.S.

Answer Drawer, page 68

FOR THE RECORD

Getchyer Red-hots!

Who sells the most hot dogs in a year?

1. Coney Island concessions
2. Dodger Stadium
3. O'Hare Airport
4. Howard Johnson's restaurants, nationwide

—C. J. Oates

Answer Drawer, page 68

ELIZABETH FERRET-FROWNING

A Brassy Robbery

Can a delicate blonde who looks like a quattrocento contessa, writes poetry, and dotes on her cocker spaniel, Blush, succeed in the nasty world of larceny, felony, and homicide?

You bet.

Elizabeth Ferret-Frowning is a private operator with a fast-growing reputation in law enforcement circles. She is a black belt in karate and a sharpshooter, but has never even swung her pocketbook at a perpetrator. She relies instead on her unusually keen powers of observation.

From the moment she pushed the revolving door and entered the Early American Restaurant, Lizzie was enchanted. The place was filled with antiques—stained-glass windows, old prints on the walls, and even an antique popcorn wagon that served as a salad bar.

She made a mental note to come back for a meal when she wasn't on business. She had been summoned by the owner, Alden Bradford, to try to solve the theft of his antique cash register.

"How much money was in it?" Lizzie asked.

"Oh, it was empty. I take the receipts to the bank myself each night when I lock up. But the cash register itself was an antique—solid brass and very ornate. I paid $5,000 for it 10 years ago."

"When did you discover it was missing?"

"This afternoon, just before we opened. I didn't discover it—one of my employees did." He beckoned to a young man in an apron. "He'll tell you about it."

"I was the first one to get to work today," Benny Burton said. "I unlocked the back door and came through the kitchen into the dining room. As I entered, I saw two men lifting the cash register off the counter. I asked what they were doing, and when they heard me, they ran out the front door with the cash register between them. By the time I got there, they were driving away. I couldn't see the license number."

"If only I hadn't been late today," Mr. Bradford said. "I could have caught the thieves myself."

"You've already caught your thief," Lizzie said, pointing to Benny. "He came early and stole the cash register himself."

How did Lizzie know that Benny was lying?

—Peg Kehret

Answer Drawer, page 68

ILLUSTRATION BY MITSURA SALGIAN

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WORDPLAY

Uh-ndun

Can you think of an uncapitalized 10-letter word that contains the consecutive letters NDUN?

—M. R.

Answer Drawer, page 68

TEASERS

Twice in a Blue Moon

Suppose a full moon occurs every 28 3/4 days. Is it possible for a full moon to occur twice in one month, twice in a year?

—Allan B. Calhamer

Answer Drawer, page 68

TRIVIA

Howdah You Do?

1. Who was the first woman to be launched into space?
2. In the 4H Club, what are the four Hs?
3. To whom was the plea "Say it ain't so, Joe" addressed?
4. What insurance company will reputedly insure anything?
5. If you just toured Botafogo Bay and took a cable car to the top of Sugarloaf, where are you?
6. According to Hoyle, what are the oldest gaming instruments?
7. What is the predominant flavor of aioli sauce?
8. What does ZIP in ZIP code stand for?
9. On what would you be riding if you sat in a howdah?

Answer Drawer, page 68

—from *Isolated M*, American Mensa Limited. © 1975 by Harper Fowley

HARRY HARDWAY

Simon Says

Harry was driving his 12-year-old daughter, Hannah, home from camp at summer's end, and she was telling him all about it.

"It was great. Except the counselors sometimes made us play childish games like Simon Says."

"You think Simon Says is childish?" Harry asked, getting an idea.

"Isn't it?" said Hannah, getting the same idea. She loved it when her father tried to confuse her with complications.

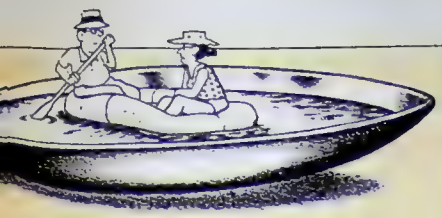
"Let's play a game," Harry said. "The rule is, I believe, that you must obey any instruction that comes after the words 'Simon Says' and disregard everything else. Since you can't move around in the car, you'll have to do it in your head. At the end I'll ask you a question. If you get it right, we'll stop for ice cream."

"Super! Let's play."

"Simon Says, stand straight, hands at your sides. Simon Says, raise your right hand. Simon Says, if your right hand is raised, put your left hand on your left hip. Simon Says, stick out your tongue. Simon Says, if one of your hands is raised, raise your opposite leg. Simon Says, if your right hand is not on your hip, reverse the positions of your two hands. Unless Simon did not tell you to raise your left leg, touch your nose with your right hand. Simon Says, the next time you hear the word 'reverse,' switch the positions of your two hands. Simon Says, if your tongue is out and one leg is raised, pull your tongue in. Simon Says, if one of your legs is raised and your tongue is not out, put your leg down. Do not reverse the positions of your two hands. Simon Says, reverse the positions of your two hands.

"OK, here's the question: Where are your hands?" —B.H.

Answer Drawer, page 68



HALL OF FAME

More Characteristic Initials

If "Disco Songstress" is Donna Summer and "Media War-horse" is Mike Wallace, what other famous people are being described below?

1. Mississippi Tale-teller
2. Madam Tory
3. Honking Mute
4. Union's Star General
5. Cinema's "Enforcer"
6. Iconoclastic Danseuse
7. Pigskin's "Bear"
8. Tennis Adolescent
9. D-Day Engineer
10. Paloma's Papa
11. *Streetcar* Klunk
12. Medalist Swimmer
13. Athos's Delineator
14. Obese Winetaster
15. Bee Gee
16. Nimble Cartwheeler

—Alex Vaughn

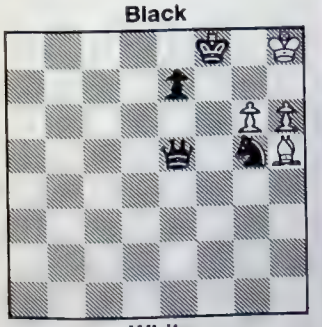
Answer Drawer, page 68

TOUGH NUTS

A Dirty Trick

T. R. Dawson created this "fairy" chess problem in 1947.

Black



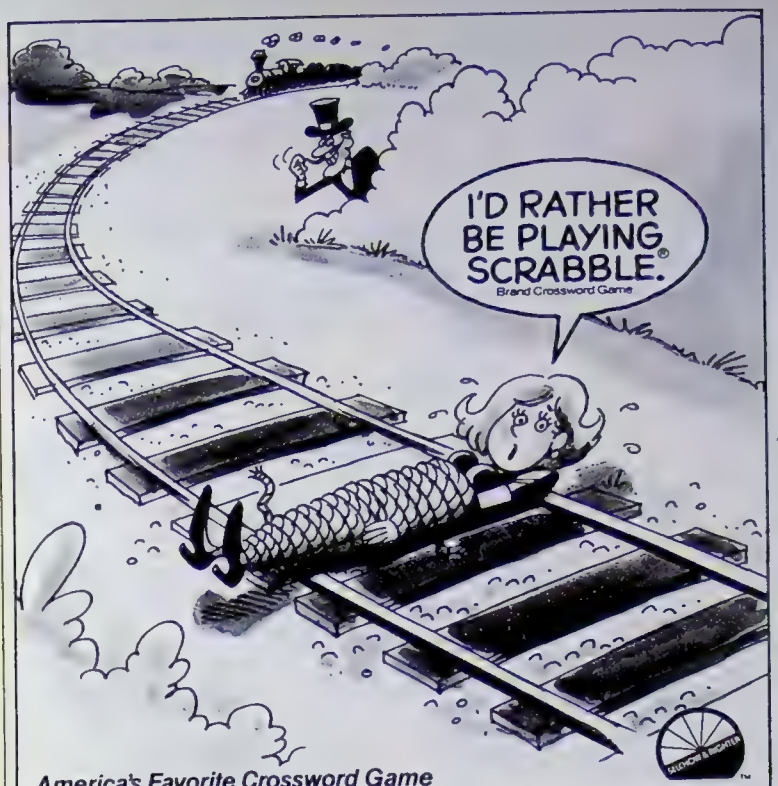
White

White wagered that he would *not* win this game. He therefore now plays and loses. . . .

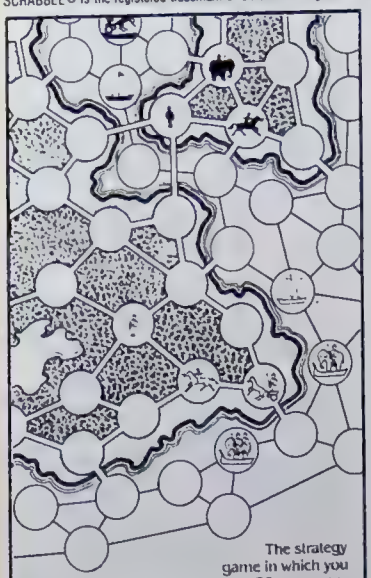
Answer Drawer, page 68

—from *A Guide to Fairy Chess* (Dover Books). ©1971 by Anthony Dickins

ILLUSTRATION BY RICK TULKA



SCRABBLE® is the registered trademark of Selchow & Righter Co., Bay Shore, NY, for its line of word games and entertainment services



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ANSWER DRAWER

12 Logic

Siren Song
Uppamolas, the black pig, was the survivor. Blumenes, the pink pig, ate himself to death, and Dethentaxes, the gray pig, expired in the quicksand.

Esperanto, Anyone?
Pravitt speaks English and his native Finnish.
Jorlaan speaks his native Finnish, Tagalog, and Arabic.
Marnik speaks Arabic and his native Spanish.
Neubtor speaks his native Spanish, Czech, and Italian.
Bjellorsen speaks Italian, Russian, Greek, and his native Danish.

The Play's the Thing
In order of age, from youngest to oldest:
John, the Potter, portrays Atalanta.
Lawrence, the Woodworker, portrays Venus.
George, the Cobbler, portrays the King.
Francis, the Smith, portrays Echion.
Richard, the Brewer, portrays Hippomenes.

41 Cryptic Warm-Up Puzzle

ACROSS
1. RODE. The answer RODE (defined as "went on horseback") is the word RODEO ("cowboy roundup") missing its last letter, or "endless."
5. FRAGILE. If the word RAG ("scrap of cloth") is literally put in FILE ("dossier"), the result is FRAGILE ("delicate").
6. LEERING. The answer LEERING ("looking slyly at") is an anagram of LINER E.G. The word "wrecked" suggests the rearrangement.
7. SHED. The word SHED in two different senses means "loses hair" and "a hovel."

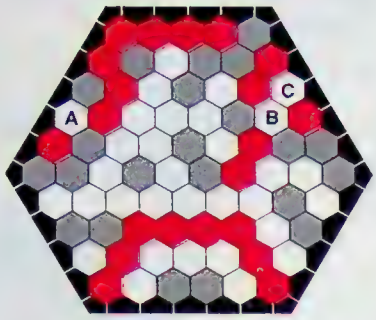
DOWN
1. REFILL. The answer REFILL ("put in a replacement") is a combination of REF ("umpire") and ILL ("sick")
2. DIAPER. The word DIAPER ("baby's attire") would be REPAID ("returned to lender") if it were reversed, or "when it turns up."
3. FINISH. The word FINISH ("the end") sounds the same as FINNISH ("Scandinavian language"). The phrase "is spoken" indicates the homophone.
4. MERGED. The answer MERGED ("joined forces") is literally found in the words "sumMER GE Dealers."

29 Re: Collection Recollection

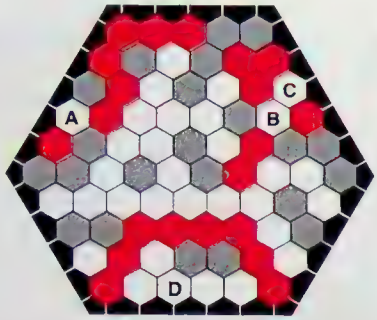
O	P	E	C			H	A	T	S		B	L	U	E
P	A	A	R		M	E	D	I	C		R	I	N	G
A	C	R	E		A	D	A	T	E		A	L	T	O
L	E	N	D	I	N	G	M	O	N	E	Y	T	O	
			I	V	I	E	S		A	X	E			
C	A	F	T	A	N			A	R	I	D	I	T	Y
A	L	I	E	N		M	E	R	I	T		N	A	E
P	O	N	D		G	U	S	T	O		M	A	P	S
R	O	E		H	A	D	E	S		D	O	N	E	E
A	F	R	I	E	N	D			L	O	V	E	R	S
			N	A	G		M	A	I	N	E			
	D	U	L	L	S	H	I	S	M	E	M	O	R	Y
S	A	G	A		T	E	N	S	E		E	L	I	A
O	N	L	Y		E	R	I	E	S		N	E	A	R
W	A	Y	S		R	E	S	T			T	O	L	D

54 Star: Problems

1. Red plays A. If then Black B, Red C wins.



2. Despite the position's similarity to the previous problem, Red must play B this time. Then if Black A, Red D assures Red of getting all 3 undecided points at the lower edge, and a winning total.



3. Red wins with A, by the pairing strategy shown. (That is, wherever Black plays next, Red will respond in the cell with the same letter.) Any other first move for Red loses.

3.

4.

4. Red wins with A, to which Black's best response is B. (This is far from obvious, but other Black moves would offer Red more than one winning choice on his next move.) Red now plays C, and is assured of occupying one each of the cells marked D and E, winning by a point. If Red played anywhere other than A on his first move, Black would win by playing there himself.
Problem 4 was analyzed with the help of a computer program written by Craige Schensted in assembly language for the Commodore 64. The program plays Star perfectly on a 12-cell board, which is surprisingly difficult for humans to master.

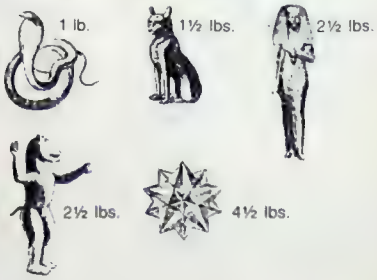
42 Double Cross

A. WOODEN SHOES
B. INNOVATION
C. LOOS
D. DEMOTED
E. EFFICIENCY
F. PECCARY
G. INTERPLAY
H. CONCH
I. THEM
J. UNDERSHOOT
K. RAFFLED
L. EQUANIMITY
M. OENOLOGY
N. FORECASTLE
O. DECELERATE
P. *OKLAHOMA!*
Q. ROLLS
R. IMPOSTORS
S. ANCHORITE
T. NIGHT SHIFT
U. GET-TOGETHER
V. REALM
W. AQUAMARINE
X. YELLOW SEA

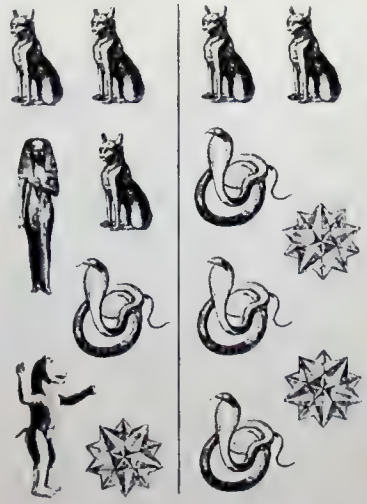
I choose my friends for their good looks, my acquaintances for their good characters, and my enemies for their good intellects. I have not got one who is a fool. They are all men of some intellectual power, and consequently they all appreciate me — (Oscar) Wilde, *(The) Picture of Dorian Gray*

40 Weighs and Means

The respective weights of the icons are:



The correct division is:



For a detailed, step-by-step solution, send a self-addressed stamped envelope to: "Weighs and Means," GAMES, 515 Madison Ave., New York, NY 10022.

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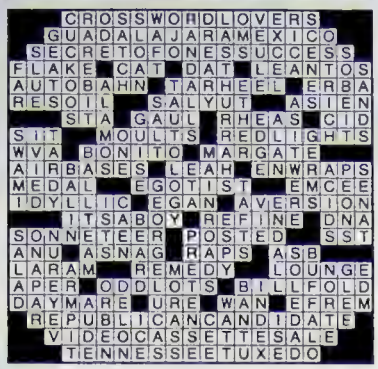
ANSWER DRAWER

39 Ace Construction



58 Eyeball Benders

1. English muffin
2. Change purse
3. Dresses on clothes rack
4. Wooden spoons
5. Cleanser can
6. Eggs in carton
7. Umbrella

34 Dszquphsbnt!

1. CRYPTOON. "It's a wonder I haven't gone crazy, stranded alone all these years in this old Victorian mansion."
2. INFALLIBILITY. "The older I grow, the more I distrust the familiar doctrine that age brings wisdom." H. L. Mencken.
3. SELF-EVIDENT. Anyone who believes a psychiatrist can help him probably should have his head examined.
4. PERSPECTIVE. Maurice Chevalier, on how it feels to be an octogenarian: "Not bad, considering the alternative."
5. THE USES OF ADVERSITY. A certain amount of opposition can be a great help to a man. Kites rise against, not with, the wind.
6. STEPLADDER OF SUCCESS. Keeping your nose to the grindstone may help you get ahead in your work, or it may get you a short nose.
7. RULE #1. No mechanical problem is too tough to be solved by brute strength and ignorance.

28 Moving Picture

1. B-2
2. I-10
3. E-2
4. G-5
5. B-10
6. F-4
7. H-7
8. C-9

WILD CARD ANSWERS

Self-Reference

IN THIS STATEMENT THE NUMBER OF OCCURENCES OF E IS FIFTEEN, OF I IS NINE, OF N IS ELEVEN AND OF T IS SEVEN

Liz: A Quiz

Cleopatra (1962), *The V.I.P.'s* (1963), *The Sandpiper* (1965), *Who's Afraid of Virginia Woolf?* (1966), *The Comedians* (1967), *The Taming of the Shrew* (1967), *Dr. Faustus* (1967), *Boom* (1968), *Under Milk-Wood* (1971), *Hammersmith Is Out* (1972)

A Brassy Robbery

There is no way for two men to carry a cash register through a revolving door

After-Math

a. 18: The numbers are half the squares of 1, 2, 3, 4, 5, and 6
b. 2/3: 4 = 4/1, 2 = 4/2, 1 1/3 = 4/3, 1 = 4/4, 4/5, and 2/3 = 4/6.
c. 2: 1 1/1 = 1 + 1 = 2

What's In a Name?

The number 1,009 in Roman numerals is MIX (Tom), 54 is LIV (Ullmann), and 501 is DI (Princess Diana)

Getchyer Red-Hots!

O'Hare Airport, in Chicago, to the tune of 293,000 pounds.

Uh-ndun

The word is GRANDUNCLE.

Twice In a Blue Moon

Yes. Since February has only 28 days, it is possible for no full moon to occur in that month. If a full moon occurs at the beginning of January and again just before February begins, the next one will occur at the beginning of March and the one after that at the end of March. Thus there would be two full moons in January and two in March. (In a leap year, however, it is not possible for two months to have two full moons each.)

Howdah You Do?

1. Valentina Tereshkova, in 1963
2. Head, Heart, Hands, and Health
3. Shoeless Joe Jackson
4. Lloyds of London
5. Rio de Janeiro
6. Dice
7. Garlic
8. Zone Improvement Program
9. An elephant

Simon Says

Hannah said, "My left hand is raised and my right hand is on my hip."

"Right," said Harry, trying to decide whether to have a strawberry sundae with chocolate syrup or a chocolate sundae with strawberry syrup.

"Dad, after our ice cream can we play Simon Says again?"

More Characteristic Initials

1. Mark Twain; 2. Margaret Thatcher; 3. Harpo Marx; 4. Ulysses S. Grant; 5. Clint Eastwood; 6. Isadora Duncan; 7. Paul Bryant; 8. Tracy Austin; 9. Dwight D. Eisenhower; 10. Pablo Picasso; 11. Stanley Kowalski; 12. Mark Spitz; 13. Alexandre Dumas; 14. Orson Welles; 15. Barry Gibb; 16. Nadia Comaneci

A Dirty Trick

White moves 1. g6-g7+ (his only legal move) and loses . . . *his wager!* The forced continuation is 1. . . . Qe5xg7+ 2. h6xg7 mate.

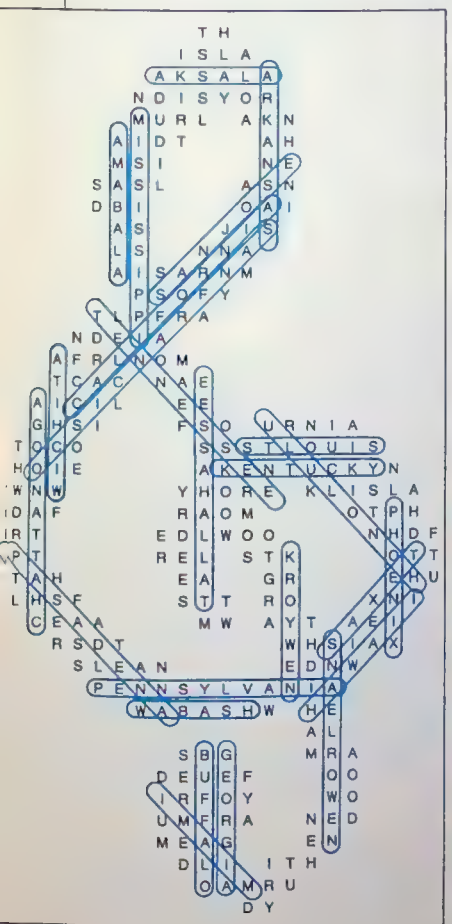
31 Boxes 'n Boxes

H	E	A	T		F	E	R	N	S			B	A	T
O	T	T	O		A	L	E	A	K		R	A	V	E
O	N	O	R		N	U	D	G	E		O	K	I	E
F	A	I	R	A	N	D	□		T	I	M	E	S	□
				E	R	I	E		A	C	T	E		
□	D	A	N	C	E		□	S	H	O	O	T	E	R
M	E	L	T	S		U	P	P	E	R		A	R	E
E	N	O	S		K	N	E	E	S		D	R	A	B
A	S	H		F	E	I	G	N		C	O	P	S	E
L	E	A	F	L	E	T	S		D	A	M	S	E	L
				L	O	P	E		D	R	E	I		
M	A	R	I	E	S		G	R	A	N	N	Y	□	S
C	A	A	N		A	G	L	O	W		I	O	O	O
□	R	I	G		K	E	E	N	E		O	R	F	F
D	E	N			E	M	E	E	R		N	E	X	T

Fake Advertisement

The "Fake Ad" announced in the Table of Contents was for the National Parks Prospectus, and appeared on page 6. Photographs by UPI. Retouching by Bob Rakita.

30 America Sings!



29 Righting Lesson

1. Bill of Rights
2. Right angle
3. Copyright
4. *The Price is Right*
5. "Right on!"
6. Right field
7. Upright
8. Civil Rights Act
9. Right of way
10. Dudley Do-Right
11. Two wrongs don't make a right
12. Fortnight
13. "I would rather be right than be President"
14. *The Right Stuff*

8 Gamebits

The Cards of Summer

1. (g) Bill "Moose" Skowron
2. (d) Greg "The Bull" Luzinski
3. (j) Jimmy "The Toy Cannon" Wynn
4. (f) Orlando "The Baby Bull" Cepeda
5. (e) Dick "Dr. Strangeglove" Stuart
6. (a) Sal "The Barber" Maglie
7. (b) Al "The Mad Hungarian" Hrabosky
8. (c) Ken "The Hawk" Harrelson
9. (i) Walt "No Neck" Williams
10. (h) Dick "The Monster" Radatz.

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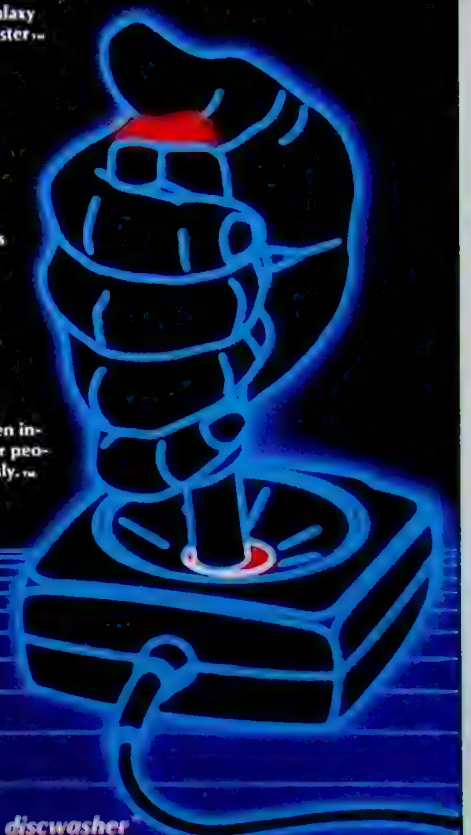

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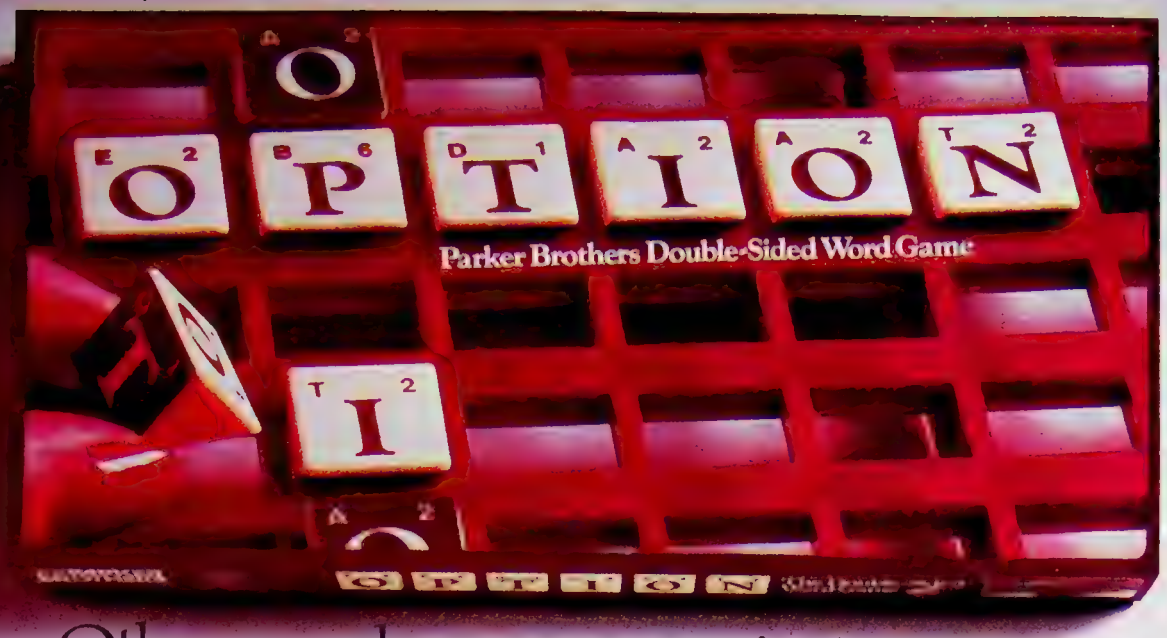

Other word games were just practice.

Introducing OPTION.™ With double-sided letter prisms, so you can make better words. Change a word already played. And score more! Now aren't you ready for OPTION?

PARKER BROTHERS

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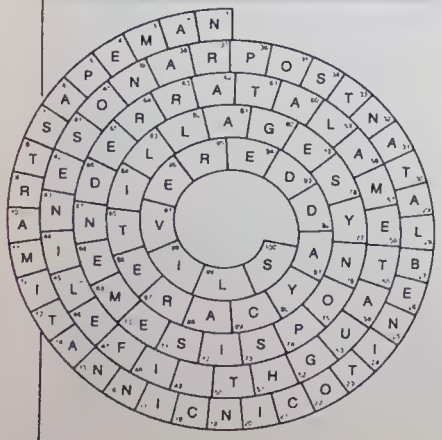
32 Illustrated Hinky-Pinkies

1. Checkered record
2. Toaster poster
3. Speaker's sneakers
4. Beaver fever
5. Monk's skunks
6. Rich witch
7. Yankee hanky
8. Wino rhino
9. Tennis menace
10. Collie trolley
11. Blender vendor
12. Royalty loyalty

27 The Spiral



31 Shrink Words

1. CONCERTO, CONCERT, CONVERT, COVERT, COVET, COVE, CONE, ONE, ON, O

2. STRAGGLED, STRANGLED, STRANGLER, STRANGER, STRINGER, STINGER, SINGER, SINGE, SING, SIN, IN, I

3. LIGHTENING, LIGHTNING, LIGHTING, SIGHTING, SIGHING, SIGNING, SINNING, WINNING, WINING, WIRING, WRING, WING, WIN, IN, I

44 Quiet, Please!

	C	O	C	O		R	E	M	A	N	D		S	K	I	M	P	S
A	R	R	O	W		E	M	I	L	I	A		A	L	L	U	R	E
S	I	L	E	N	T	S	P	R	I	N	G		Y	E	O	M	E	N
S	T	E		S	A	T				A	G	R	E	E		S	S	T
I	T	A	L		G	O	R	E	S		E	A	R		A	T	T	A
S	E	V	E	N		N	U	R	S	E	R	Y		H	S	H		
T	R	E	M	O	R		B	E	E	S				A	P	E	C	K
			U	R	E	Y	S			C	A	B		D	E	W	A	N
R	A	T	R	A	C	E		S	P	A	R	E	S		N	O	N	O
A	C	H		H	U	S	H	P	U	P	P	I	E	S		R	O	W
I	T	E	M		R	E	S	A	L	E		G	L	A	D	D	E	N
T	O	Q	U	E			S	T	Y			T	E	M	P	O		
T	R	U	S	I	S				E	N	T	S		A	P	R	O	N	S
		I	T	S		F	E	D	O	R	A	S		Y	A	P	O	K
W	H	E	Y		A	R	M		H	A	R	P	O		S	E	M	I
R	U	T		D	R	O	O	P				I	N	K		N	A	R
A	R	M	F	U	L		T	A	C	I	T	C	O	N	S	E	N	T
P	R	A	I	S	E		E	L	A	I	N	E		O	R	R	I	S
S	Y	N	G	E	S		S	P	L	I	T	S		B	O	S	S	

During his complete term as a member of Parliament, Isaac Newton spoke only once. He asked to have a window opened!

46 Over a Barrel

The route is shown below

10 Interplanetary Mind Reading

Even 238,857 miles away, the answer is clear to me—you have landed on the moon.

22 Lost in the Ozone

As you've probably figured out, all the images end in O.

Left-hand third of the page, roughly left to right, top to bottom:
Franco Harris
Piano
Al Pacino (extra credit if you also named *Serpico)*
"Hi-Yo Silver!"
Tonto
Pogo
Art Deco (rug)
Crisco
Han Solo (*Star Wars*)
Pablo Picasso
Tuxedo
Placido Domingo
Dumbo
Sluggo
Captain Furillo (*Hill Street Blues*)
Mr. Potato Head and Mrs. Potato Head (extra credit if you knew they're produced by Hasbro)
Go (Monopoly)
Silo
Lasso (extra credit for rodeo and bronco)
Volcano
Pinocchio
Pluto
Domino

Center third:
Marlon Brando
Texaco
Phil Esposito
Jell-o
Apollo 15 (moon mission)
Tabasco sauce
Joe DiMaggio
Harpo, Chico, and Groucho Marx
Buffalo Bill Cody
Elvis Costello
Ringo Starr
Oreo cookie
Zippo lighter
Photo of Rudolph Valentino
Devo
Greta Garbo
Marlboro cigarettes
Ohio (postcard)
Flamingo

Right-hand third:
Radio
Norelco shaver
Tomato
Bluto
Lucy and Ricky Ricardo
Bingo
Uno
Cadillac Eldorado
Fats Domino
Go (the game)
Palomino
Rocky Marciano
Zorro
Alamo
C-3PO
Mexico (flag)
Brillo
Mario Lanza (extra credit if you knew he was playing the role of Enrico Caruso)
Go-Go's
Cameo
Louis "Satchmo" Armstrong

41 Cryptic Crossword

ACROSS
1 Politician (in Capitol I)
6 Awed (a + wed)
10 Terrain (winTER RAINstorm)
11 Atheist (at + heist)
12 Essential (sea inlets)
13 Scene (seen)
14 Twine (t + wine)
16 Ethereal (e + the + real)
19 Deflated (flat + deed)
21 Pasta (past + a)
23 Token (Ten + OK)
24 Landslide (denial + LSD)
26 Rotunda (around + T)
27 Skillet (set + kill)
28 Herd (heard)
29 Ghost story (host's + t + gory)

DOWN
1 Patients (tie + pants)
2 Lyres (rely + S)
3 Trainee (in a tree)
4 Continent (content + in)
5 Avail (a veil)
7 Whitecaps (with + space)
8 Duties (due it's)
9 Chaser (search)
15 Ice skater (create ski)
17 Hedonists (dishonest)
18 Tapestry (tapes + try)
20 Linens (lines + n)
21 Pistils (pi + slits)
22 Starch (st. + arch)
24 Leash (heals)
25 Igloo (bIG-LOOking)

30 America Sings!: Word List

1. TEXAS
2. MIAMI
3. ALASKA
4. WABASH
5. HAWAII
6. BUFFALO
7. GEORGIA
8. PHOENIX
9. ALABAMA
10. WICHITA
11. ST. LOUIS
12. NEW YORK
13. SAN JOSE
14. ARKANSAS
15. HONOLULU
16. KENTUCKY
17. PASADENA
18. TENNESSEE
19. CALIFORNIA
20. NEW ORLEANS
21. CHATTANOOGA
22. MISSISSIPPI
23. TALLAHASSEE
24. PENNSYLVANIA
25. SAN FRANCISCO

49 The Late Show

1. *Casablanca*
2. *Gone With The Wind*
3. *Psycho*
4. *King Kong*
5. *High Noon*
6. *The African Queen*
7. *A Day at the Races*
8. *Sunset Boulevard*
9. *The Wizard of Oz*
10. *Now, Voyager*
11. *Miracle on 34th Street*
12. *All About Eve*

This puzzle was based on an idea by Samuel W. Davis.

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24 Second Guessing

1. MONTHS
2. CENTURIES
3. MONTHS
4. HOURS
5. WEEKS
6. CENTURIES
7. MINUTES
8. HOURS
9. MONTHS
10. DAYS
11. SECONDS
12. HOURS
13. MONTHS
14. MINUTES
15. SECONDS
16. SECONDS
17. CENTURIES
18. MINUTES
19. CENTURIES
20. CENTURIES

The basis for each answer is given below. We've used estimates where precise figures were not available.

1. 25,000 miles $\times \frac{1 \text{ hour}}{4 \text{ miles}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ month}}{30 \text{ days}} = 8.7$ MONTHS

2. \$1,000,000,000 $\times \frac{1 \text{ day}}{\$3{,}000} \times \frac{1 \text{ year}}{365 \text{ days}} \times \frac{1 \text{ century}}{100 \text{ years}} = 9.1$ CENTURIES

3. 1,000,000 names $\times \frac{1 \text{ minute}}{10 \text{ names}} \times \frac{1 \text{ hour}}{60 \text{ minutes}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ month}}{30 \text{ days}} = 2.3$ MONTHS

4. 2,600 miles $\times \frac{1 \text{ hour}}{742 \text{ miles}} = 3.5$ HOURS

5. 4 WEEKS

6. 93,000,000 miles $\times \frac{1 \text{ hour}}{3 \text{ miles}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ year}}{365 \text{ days}} \times \frac{1 \text{ century}}{100 \text{ years}} = 35.4$ CENTURIES

7. It took our play-tester 5 MINUTES.

8. 110,000 hairs $\times \frac{1 \text{ second}}{2 \text{ hairs}} \times \frac{1 \text{ minute}}{60 \text{ seconds}} \times \frac{1 \text{ hour}}{60 \text{ minutes}} = 15$ HOURS

9. 3,000,000 awards $\times \frac{1 \text{ minute}}{6 \text{ awards}} \times \frac{1 \text{ hour}}{60 \text{ minutes}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ month}}{30 \text{ days}} = 11.6$ MONTHS

10. 984 feet $\times \frac{1 \text{ hour}}{16 \text{ feet}} \times \frac{1 \text{ day}}{24 \text{ hours}} = 2.6$ DAYS

11. 238,000 miles $\times \frac{1 \text{ second}}{186{,}000 \text{ miles}} = 1.3$ SECONDS

12. 18 years $\times \frac{365 \text{ days}}{1 \text{ year}} \times \frac{1 \text{ foot}}{1 \text{ day}} \times \frac{.053 \text{ minute}}{1 \text{ foot}} \times \frac{1 \text{ hour}}{60 \text{ minutes}} = 5.8$ HOURS

13. 5,800 miles $\times \frac{1 \text{ hour}}{3 \text{ miles}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ month}}{30 \text{ days}} = 2.1$ MONTHS

14. 368,000,000 miles $\times \frac{1 \text{ second}}{186{,}000 \text{ miles}} \times \frac{1 \text{ minute}}{60 \text{ seconds}} = 33$ MINUTES

15. $t = \sqrt{2d/g}$, where t = time, d = distance, and g = gravitational acceleration (32 feet/second^2), so:
$t = \sqrt{\frac{2 \times 29{,}028 \text{ feet}}{32 \text{ feet/second}^2}} = 42.6$ SECONDS

16. 3 SECONDS, according to our play-testing

17. 18,000,000 books $\times \frac{250 \text{ pages}}{1 \text{ book}} \times \frac{400 \text{ words}}{1 \text{ page}} \times \frac{1 \text{ minute}}{300 \text{ words}} \times \frac{1 \text{ hour}}{60 \text{ minutes}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ year}}{365 \text{ days}} \times \frac{1 \text{ century}}{100 \text{ years}} = 114$ CENTURIES

18. Ours burned 11 MINUTES.

19. 1 square mile $\times \frac{4{,}014{,}489{,}600 \text{ square inches}}{1 \text{ square mile}} \times 0.1$ inches $\times \frac{1 \text{ gallon}}{231 \text{ cubic inches}} \times \frac{1 \text{ day}}{3 \text{ gallons}} \times \frac{1 \text{ year}}{365 \text{ days}} \times \frac{1 \text{ century}}{100 \text{ years}} = 15.9$ CENTURIES

20. $(2^{17} - 1)$ days $= 131{,}071$ days $\times \frac{1 \text{ year}}{365 \text{ days}} \times \frac{1 \text{ century}}{100 \text{ years}} = 3.6$ CENTURIES

Travel Cover

The 15 U.S. cities and 25 foreign countries represented by our souvenirs are listed below. (For ease of identification, we've divided the cover roughly into vertical thirds.)

Left-hand third, approximately left to right, top to bottom:
Statue of Liberty, New York City
Flamenco dolls, Spain
Stuffed elephant, India
Bean pot, Boston
Green cable car, San Francisco
Mickey Mouse ears, Walt Disney World, Orlando, Florida
Leprechaun mug, Ireland
Mountie on horse, Canada
Viking ship, Norway
Rameses II cigarettes, Egypt
Tropical shirt (only sleeve is showing), Jamaica
Road map jigsaw puzzle, Milwaukee
Liberty Bell, Philadelphia

Middle third:
Wooden puppet, Bali
Paper mobile, Japan
Tinned pâté, France
Rum, Puerto Rico
White statuette of *The Discus Thrower*, Greece
Red tartan scarf with yellow fringe, Scotland
Slot machine bank, Las Vegas
Washington Monument thermometer, Washington, DC
Leaning Tower of Pisa cheese shaker, Italy
Yellow box of pralines, New Orleans
Red double-decker bus, England
Fuschia lei, Honolulu
Blue and white Delft shoe ashtray, Holland
Dallas Cowboys belt, Dallas
Straw sombrero, Mexico
Shalom tile, Israel

Right-hand third:
"Music City" pillow cover, Nashville
Plate, Chicago
Piggy bank of chubby man in robe, China
Beer stein, Germany
Baltimore Orioles baseball cap, Baltimore
Nesting wooden dolls, U.S.S.R.
Swiss Army knife, Switzerland
Blue tin of Elsinore butter cookies, Denmark
Birchleaf sauna soap, Sweden
Wooden rhino, Kenya
Map of movie stars' homes, Hollywood

EUREKA

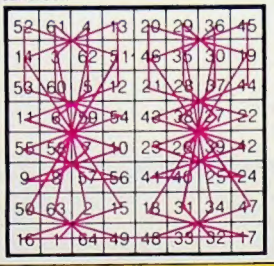
Eureka is dedicated to those venturesome spirits who, never settling for a ready answer, have fought their way to a better, more elegant, or more complete solution than one previously given in the Answer Drawer.

★**Manhunt** (Wild Cards, July, page 65). Readers were asked to replace the asterisks between a set of letters with a man's name, thereby forming a word. We inserted the name CARL into "s••••et" to form the word "scarlet." Georgia Deatrick, of Wichita, KA, and Marilyn Passon, of Havre, MT, found an alternate answer in HERB, making the word "sherbet."

★**An Omnipotent Ruler** (Wild Cards, June, page 67). Eric's ruler had four marks on it, one of them being one inch from the end. Where, we asked, could three other marks be placed, so that Eric could measure any integral length from one to 12 inches? Our answer was 1", 4", 7", and 10". Hold it, said Charles E. Dahms, of West Allis, WI, and Bob Lutz, of Harrisburg, PA, who found 13 other possibilities:

1, 2, 3, 8	1, 5, 9, 11	2, 5, 8, 11
1, 2, 6, 9	1, 7, 8, 10	2, 7, 8, 11
1, 3, 5, 11	1, 7, 9, 11	3, 6, 10, 11
1, 3, 7, 11	2, 4, 5, 11	4, 9, 10, 11
1, 4, 5, 10		

★**The Most Magical Square** (Wild Cards, May, page 66). Lou Cortina, of Pomona, CA, has discovered one further, and very elegant, property of Ben Franklin's 8 x 8 square—the pleasing symmetry of the pattern that results from tracing out the cells in numerical order:



COMING DISTRACTIONS OCTOBER

Horrors! A blood-curdling, spine-chilling crossword puzzle with clues by the master of the macabre, Stephen King.

Fine Tunings Our favorite video games for 1983, with a look also at joysticks and other gadgets that may or may not improve your score and self-image.

Locked Room Mysteries The fine art of the impossible crime, and an original story by Walter B. Gibson.

Cross Anagrams A word skill contest that lets you change your mind.

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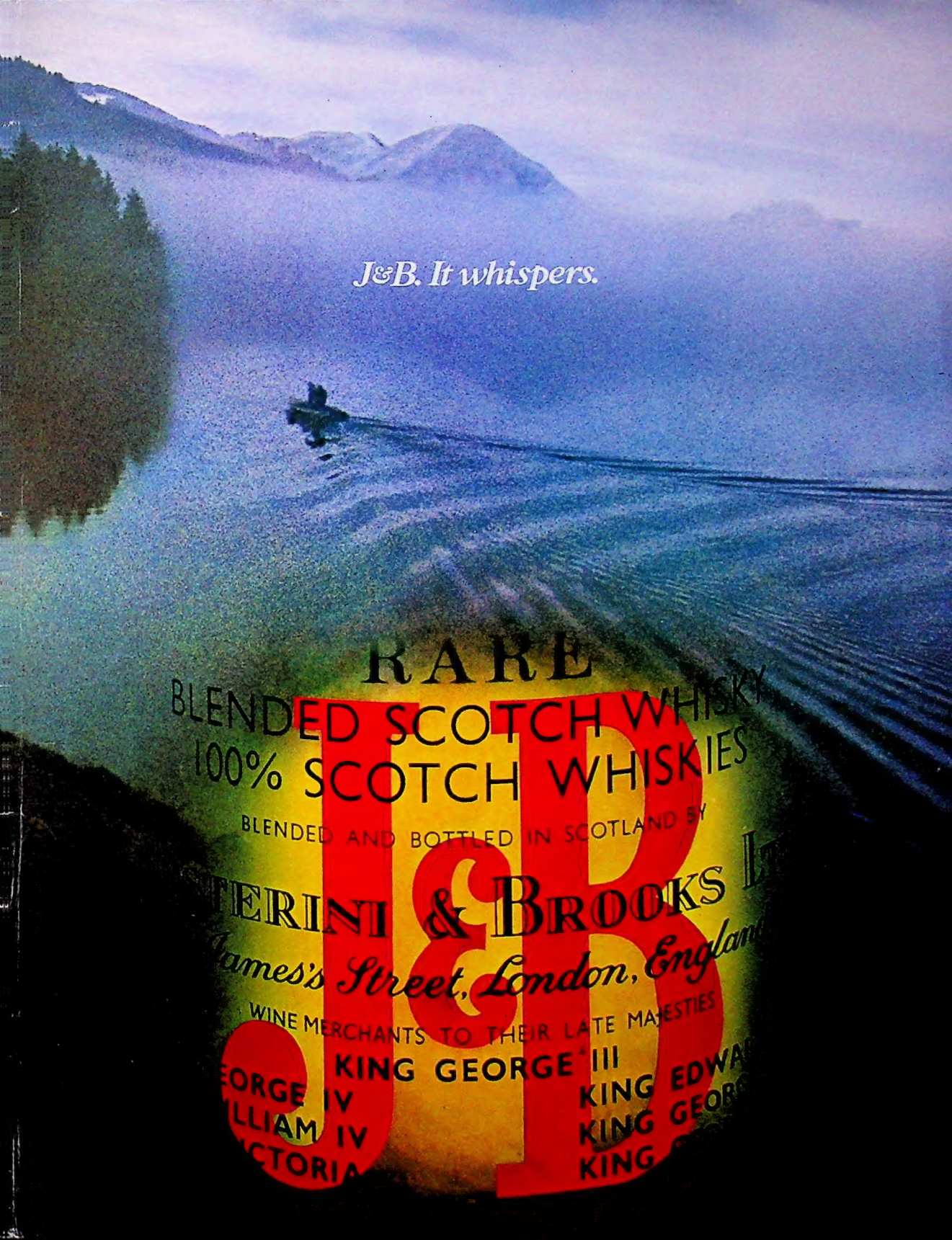
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